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ABSTRACT

This report, the first of a six-part, intensive longitudinal study, examines the relationships between selected demographic, attitudinal, and educational characteristics of male youth in the United States and their labor market experience and occupational aspirations. The data are drawn from interviews conducted during October-December 1966, with a national sample of the noninstitutional civilian population of males 14 to 24 years of age. Analysis of numerous tables is used to seek explanations for variations in their experiences based on economic, social, and psychological variables. The report is organized in eight chapters. The first chapter introduces the study and explains how it was conducted. Chapter 2 presents a description of the demographic and social characteristics of the age cohort of males 14-24 based upon the sample data. The determinants of labor force participation and employment status are analyzed in Chapter 3. Youth's employment patterns, such as types of jobs held, the number of hours per week worked, rate of compensation, and mobility patterns are studied in Chapter 4. Chapter 5 examines the variation in occupational information among young men and the factors that appear to be related, both as causes and effects, to such variation. Chapter 6 focuses upon attitudes of workers toward their current jobs and the extent of their attachment to these jobs. The educational and occupational aspirations of high school youth and of young men no longer enrolled in school are analyzed in Chapter 7. The findings and conclusions of the study are summarized in Chapter 8. On the basis of these findings, various hypotheses are presented that would be tested with the data collected in subsequent surveys. (KC)

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CAREER THRESHOLDS:

A longitudinal study of the educational and labor market experience of male youth 14-24 years of age

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VOLUME ONE
February, 1969

Center for Human
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FOREWORD

In early 1965, the Center for Human Resource Research, under a contract with the United States Department of Labor, began the planning of longitudinal studies of the labor market experience of four subsets of the United States population: men 45-59 years of age, women 30-44 years of age, and young men and women 14-24 years of age. The present volume is the initial report on the younger group of men. A preliminary and abbreviated version of this report, under the title "Some Correlates of the Labor Market Status of Male Youth," was prepared for presentation at the Conference on Transition from School to Work at Princeton University, May 9-10, 1968.

Cost considerations dictated limiting the population covered; given that constraint, these four groups were selected for study because each faces special labor market problems that are challenging to policy makers. For the young men and women, the problems are those revolving around the process of occupational choice and include both the preparation for work and the frequently difficult period of accommodation to the labor market when formal schooling has been completed. The special problems of the older male group are reflected in a tendency for unemployment, when it occurs, to be of longer-than-average duration and in the fact that average annual incomes of males decline continuously with advancing age beyond the mid-forties. In the case of the older of the two groups of women, the special problems are those associated with re-entry into the labor force on the part of a great many married women after their children no longer require their continuous presence at home.

While the more-or-less unique problems of each of the subject groups to some extent dictate separate orientations for the four studies, there is, nevertheless, a general conceptual framework and a general set of objectives common to all of them. Each of the four studies views the experience and behavior of individuals in the labor market as resulting from an interaction between the characteristics of the environment and a variety of demographic, economic, social, and attitudinal characteristics of the individual. Each study seeks to identify those characteristics that appear to be most important in explaining variations in several important facets of labor market experience: labor force participation, unemployment experience, and various types of labor mobility. From one point of view, the general objective of all of the studies might be defined as follows: to uncover the complex of economic, social, and psychological factors that are associated with successful adaptation by individuals to the labor market. Knowledge of this kind may be expected to make an important contribution to our understanding of the way in which labor markets operate and thus to be useful for the development and implementation of appropriate labor market policies.

For each of the four population groups described above, a national probability sample of the noninstitutionalized civilian population has been drawn by the Bureau of the Census. Members of each sample will be surveyed annually for a five-year period (for a total of six surveys per group). The present volume reports the results of the initial interview survey of the men aged 14 to 24, which was conducted in the autumn of 1966. Initial surveys have been conducted for the other three groups. A report comparable to the present one has been completed for the older group of males, and similar reports will be prepared for the first survey of each of the two groups of women. In addition, we contemplate reports on each of the follow-up surveys, a final report on each of the age-sex groups, and at least one major volume integrating the results of all of the studies. At the conclusion of the total project there will have been collected the most detailed and comprehensive set of work history and attitudinal data that has ever been accumulated for national samples of individuals.

Both the overall study and the present report are the product of the joint effort of a great many persons, not all of whom are even known to us. The research staff of the Center has enjoyed the continuous expert and friendly collaboration of personnel of the Bureau of the Census, which, under a separate contract with the Department of Labor, is responsible for developing the samples, conducting all of the interviews, processing the data, and preparing the tabulations we have requested. This division of function between the Census Bureau and our research staff has obviously necessitated very close liaison, and it is hardly an exaggeration to report that the relationship between us has been more nearly like that between different sections of the same organization than that between two quite different organizations separated physically by about 400 miles. We are particularly indebted to Robert Pearl and Daniel Levine who have, in turn, served as Chief of the Demographic Surveys Division; to George Hall, Assistant Chief of the Division, who has worked with us continuously from the very inception of the project; and to Marie Argana, Richard Dodge, Marvin Thompson, and Alan Jones, who either currently or at some time during the past two years have been intimately involved in and have made substantial contributions to the project. We wish also to acknowledge our indebtedness to Rex Pullin and his staff of the Field Division, who were responsible for the collection of the data; to David Lipscomb and his staff of the Systems Division for editing and coding the interview schedules; and to Robert Bartram and his staff for the computer work.

The advice and counsel of many persons in the Department of Labor have been very helpful to us both in designing the study and in interpreting its findings. Without in any way implicating them in whatever deficiencies may exist in this report, we wish to acknowledge especially the continuous interest and support of Howard Rosen, Director of the Office of Manpower Research and the valuable advice provided by Stuart Garfinkle and Jacob Schiffman, who, as our principal contacts in the Office of Manpower Research, have worked closely with us from the outset and have made numerous suggestions for improving a preliminary version of this report.

The authors are leavily indebted to other members of the Center's staff, even though it is frequently difficult to isolate their specific contributions. A group of able graduate students--Karl Egge, Andrew Kohen, Terry Paul, and Ronald Schmidt--have left their imprint on the final product by reviewing carefully a preliminary version of each chapter and recommending improvements. In addition, Schmidt and Kohen have made such substantial contributions to the analysis and writing of particular chapters or appendices that specific acknowledgment of their role is included in the prefatory footnote to the relevant portion of the text. Betsy Schmidt and Ellen Mumma were responsible primarily for preparing the tables and checking the manuscript. Mrs. Schmidt, in addition, coordinated the entire effort, serving as the authors' principal liaison with the Census Bureau, the research assistants, and the secretarial staff. Jeanne Bonham edited the manuscript. Rosa Maria Cormanick, Dortha Gilbert, and Beth Spangler typed the several versions of text and tables.

Inevitably in a long-term project, there are numerous persons who make substantial contributions in an early period who are no longer on the scene when the project is completed. Included in this category are Thomas Ostrom and Kent Schwirian who served as Research Associates; Jane Baird, Nancy Barth, Harold Black, Thrainn Eggertsson, and Tamar Granot who were Research Assistants; and Carol Brainerd who consulted with the research staff on several occasions. To all of these, we express our thanks and the hope that they will find the product worthy of their efforts.

The Ohio State University
February, 1969

Herbert S. Parnes

TABLE OF CONTENTS

Page

FOREWORD iii

CHAPTER 1: INTRODUCTION. 1
  RESEARCH DESIGN 2
  CONCEPTUAL FRAMEWORK. 7
  THE VARIABLES 9
    Dependent Variables. 9
      Labor force participation
      Unemployment
      Mobility
      Occupational information
      Job attitudes
      Educational and occupational aspirations
    Explanatory Variables. 11
      Formative influences
      Marital and familial characteristics
      Financial characteristics
      Skills
      Health and physical condition
      School experience variables
      Work attitudes
      Environmental variables
  PLAN OF ANALYSIS. 15

CHAPTER 2: DEMOGRAPHIC AND SOCIAL CHARACTERISTICS. 17
  COLOR AND SELECTED CHARACTERISTICS. 17
    Age, School Enrollment Status, and Marital Status. . . 17
    Health Condition 18
    Educational Characteristics. 21
      Age and grade in school
      Educational attainment and training of those out of school
      High school experience
    Family Background Characteristics. 29
    Income and Assets. 33
  SCHOOL ENROLLMENT STATUS AND SELECTED CHARACTERISTICS . . 34
    Occupation of Father 36
    Type of Community. 38
    Early Home Environment 38
      Family structure
      Nationality
      Exposure to reading material
    High School Curriculum 43
    Health Condition 45
  SUMMARY 45

7

Page

- CHAPTER 3: LABOR FORCE AND EMPLOYMENT STATUS 49
  - VARIATION IN LABOR FORCE PARTICIPATION 49
    - School Enrollment Status, Age, and Color. 50
    - Age 50
    - Color 50
    - Variation in Rates among Students 52
      - Age and year of school
      - Educational plans of high school students
      - Marital status
      - Family income
      - Local unemployment rate
    - Variation in Rates among Youth Not Enrolled in School . . 60
      - Age and educational attainment
      - Health and physical condition
      - Marital status
      - Local unemployment rate
  - THE INCIDENCE OF UNEMPLOYMENT. 65
    - School Enrollment Status, Age and Color 65
    - Occupation and Industry 67
    - Marital Status. 67
    - Health and Physical Condition 71
    - Previous Unemployment 72
    - Educational Attainment and Training 72
    - Methods of Job Search 76
    - Restrictions on Availability for Work 76
  - SUMMARY. 79

- CHAPTER 4: EMPLOYMENT PATTERNS 81
  - TYPES OF JOBS HELD 81
    - Occupational Distribution 81
      - Students
      - Nonstudents
    - Industrial Distribution 86
      - Students
      - Nonstudents
    - Class of Worker 88
      - Students
      - Nonstudents
  - HOURS OF WORK AND RATE OF PAY. 88
    - Hours Worked in Survey Week 88
      - Students
      - Nonstudents
    - Hourly Rate of Pay: Youth 20-24 Years of Age 95
      - Occupation
      - Color
      - Education and training
      - Health
      - Size of labor force in local area

Page

METHOD OF FINDING CURRENT JOB. 100
Students. 100
Nonstudents 102
MOBILITY CHARACTERISTICS 102
Length of Service in Current Job. 102
Students
Nonstudents
Job Movement During 12 Months Preceding Survey: Youth 20-24 Years of Age 106
Relationship between First Job and Current Job: Youth 20-24 Years of Age 108
Occupational movement
Geographic movement
Relationship between Geographic and Occupational Movement: Youth 20-24 Years of Age 113
SUMMARY. 113
Characteristics of Current Job. 113
Mobility Characteristics. 116

CHAPTER 5: KNOWLEDGE OF THE WORLD OF WORK 119
The Occupational Information Test 120
Determinants of Occupational Information Scores 122
Age, education, and color
Cultural influences at age 14
Educational experience
Vocational training outside of regular school
The Labor Market Consequences of Occupational Information 132
Knowledge about relevant employers in area
Change in skill and responsibility in past year
Hourly rate of pay
Summary 137

CHAPTER 6: JOB SATISFACTION AND JOB ATTACHMENT. 139
JOB SATISFACTION 139
Variation in Degree of Satisfaction 139
Type of occupation and educational attainment
Industry
Factors in Job Satisfaction and Dissatisfaction 142
Factors liked best in current job
Job factors disliked
Sources of satisfaction and dissatisfaction and degree of satisfaction
JOB ATTACHMENT 149
The Concept and Measure of Job Attachment 149
Correlates of Job Attachment. 150
Age and color
Occupation

Page

Length of service
Work attitudes
Potential geographic mobility
Other characteristics
SUMMARY 160

CHAPTER 7: EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS. 163
EDUCATIONAL ASPIRATIONS AND EXPECTATIONS. 164
Educational Aspirations. 164
Educational Expectations 168
OCCUPATIONAL ASPIRATIONS. 169
Desired Occupation at Age 30 169
Relationship between Occupational and Educational Aspirations 173
Expectations of Achieving Occupational Goals 173
Reasons for Preferred Occupations. 176
CORRELATES OF HIGH OCCUPATIONAL ASPIRATIONS 178
Family Background. 178
Educational Characteristics. 180
Labor Market Information 183
SUMMARY 183

CHAPTER 8: SUMMARY AND CONCLUSIONS 187
SOURCES OF VARIATION IN EDUCATIONAL AND LABOR MARKET EXPERIENCE 189
Labor Market Status of Students and Nonstudents. 189
Color Differences. 189
Age. 191
Education and Training 192
Socioeconomic Status 192
SOME INTER-GENERATIONAL COMPARISONS 193
A FORWARD LOOK. 196

APPENDICES 199
APPENDIX A: GLOSSARY 201
APPENDIX B: SAMPLING, INTERVIEWING, AND ESTIMATING PROCEDURES 207
APPENDIX C: SAMPLING VARIATION 213
APPENDIX D: NONRESPONSE RATES. 223
APPENDIX E: COMPARISON OF DATA FROM LONGITUDINAL SURVEY AND CURRENT POPULATION SURVEY. 229
APPENDIX F: INTERVIEW SCHEDULE 243

CHAPTER ONE*

INTRODUCTION

This report examines the relationships between selected demographic, attitudinal, and educational characteristics of male youth in the United States and their labor market experience and occupational aspirations. The data are drawn from interviews conducted during October-December, 1966, with a national sample of the noninstitutional civilian population of males 14 to 24 years of age.[1] This was the first of six annual interviews that are planned with the same sample to provide the basis for an intensive longitudinal analysis of the labor market experience, plans, and achievements of this age cohort over a five-year period. The present report examines the labor force participation, unemployment experience, employment patterns, labor market knowledge, job attitudes, and educational and occupational aspirations of the age cohort as of the time of the initial survey in 1966, and seeks explanations for variations in these factors on the basis of a large number of economic, social, and psychological variables. Future reports will examine and account for the changes that occur over the five years of the study.

The aim of the total study is to contribute to a better understanding of the process of occupational choice and of accommodation by youth to the labor market. By identifying the sources of the labor market problems that many youth encounter, it is hoped that remedial policy measures will be suggested. It is acknowledged generally that youth do face especially severe labor market problems in the United States. They consistently comprise a disproportionately large share of the unemployed. In 1966, for example, despite the fact that the nation's overall unemployment rate dipped to a 13-year low of 3.8 percent, the rate for males 16-19 years of age was three times as great. The problem is particularly serious for black youth.[2] On the average, one-fifth of the blacks 16-19 years of age, compared with one-tenth of the whites, were looking for work in 1966. Unemployment, of course, is not the only labor market problem faced by youth. Being trapped in "blind alley" jobs with low earnings may be as psychologically damaging as lack of any work.

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* This chapter has been adapted from the introductory chapter of our initial report on the longitudinal study of males 45-59, and portions of the text are identical. See Herbert S. Parnes, Belton M. Fleisher, Robert C. Miljus, Ruth S. Spitz, and Associates, The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of the Cohort of Men 45-59 Years of Age, Vol. I (Columbus: The Ohio State University Center for Human Resource Research, 1968).

[1] The age criterion for inclusion in the sample was an attained age of 14 to 24 as of April, 1966.

Many of the factors associated with the labor market difficulties of the young are well documented: inadequate education, lack of skill and work experience, unawareness of available training and job opportunities, and discrimination in the case of some minority groups. What is not known, however, is the interaction among economic, sociological, and psychological characteristics that permits some members of a given socioeconomic group to make good job choices and to adjust satisfactorily to labor market conditions while others do not. For example, not all poorly educated black youth are unemployed, nor do all sons of low-income families gravitate toward less skilled jobs. An understanding of the factors that influence degree of "success" in the labor market and of the interrelationships among them is a prerequisite to the development of policy measures designed to mitigate the labor market problems of youth. It is the broad purpose of our longitudinal study to contribute to such an understanding.

I RESEARCH DESIGN

Data presented in this report were obtained through personal interviews with a national probability sample of the civilian noninstitutional population of males who, in April, 1966, were 14 to 24 years of age. The sample was drawn by the Bureau of the Census from households in the 235 areas that constituted the primary sampling units (PSU's) in the experimental Monthly Labor Survey (MLS) conducted by the Census Bureau for the Bureau of Labor Statistics between early 1964 and late 1966.[3] In order to provide statistically reliable estimates for black youth and to permit a more confident analysis of differences in labor market experience and occupational aspirations between blacks and whites, the former were over-represented in the sample by a three-to-one ratio. The sample consists of 5,225 individuals, of whom 3,734 are white. Sample cases are weighted to reflect the different sampling ratios for whites and blacks and to adjust the sample observations to independent estimates of the civilian noninstitutional population for November, 1966, by color and by the five age groups included in the study. As a result, absolute figures and percentages presented in the tables of this report relate to the total civilian noninstitutional population of males 14-24 years of age.[4]

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[2] At the expense of some accuracy, we are using the term "black" throughout this report instead of the more conventional "nonwhite," because we feel that the latter term is both awkward and invidious. In official data on the United States labor force, "nonwhites" include such groups as Indians, Chinese, and Japanese as well as Negroes. However, since Negroes constitute over 90 percent of the total "nonwhite" category, their characteristics are, by and large, the characteristics of the total, and it is generally understood that data on "nonwhites" are descriptive of Negroes, but not, for example, of Chinese-Americans. Our data are classified into the two color groups in the same way as the official data, but the interpretations that would in any case be drawn are made more explicit by referring in tables, as well as in the text, to all those who are not Caucasian as "black."

As in any survey based upon a sample, the data are subject to sampling error; that is, variation attributable solely to the fact that the data emerge from a sample rather than from a complete count of the universe being examined. Since the probability of a given individual's appearing in the sample is known, it is possible to estimate approximate sampling error. Tables showing sampling errors, together with instruction for their use, appear in Appendix C.

The tables in this report have a number of characteristics that deserve some comment at this point. In a study of this kind, interest generally focuses on relative magnitudes, rather than absolute, e.g., the proportions of white youth and of black youth who have a given characteristic, rather than their numbers. Accordingly, data in virtually all tables are presented in terms of percentages. In all cases, however, the base of each percentage is shown so that its statistical reliability can be estimated. A reader, therefore, readily can estimate an absolute magnitude by multiplying the relevant percentage by its base.

In calculating percentage distributions, cases for which no information was obtained are excluded from the total. This amounts to assuming that those who did not respond to a particular question do not differ in any relevant respect from those who did--a reasonably safe assumption for most variables, especially when the number of no responses is small.[5] All percentage distributions, therefore, should add up to 100 percent; when they do not, it is because of rounding. It should be observed, however, that when absolute numbers do not add up to the indicated total, the difference is attributable (unless otherwise noted) to cases for which no information was obtained, as well as to rounding.

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[3] The Monthly Labor Survey (MLS) was designed to test a number of changes in the interview schedule for the Current Population Survey (CPS) that had been proposed as a means of refining and improving current measures of the labor force, employment and unemployment. After two and a half years of experimentation and pretesting, the CPS schedule was amended in January, 1967, and the two samples were merged, enlarging the CPS sample to 52,500 households in 449 areas. The changes were relatively minor leaving the basic labor force concepts largely undisturbed. (See U.S. Department of Labor, Employment and Earnings and Monthly Report of the Labor Force, Vol. 13, No. 8, February, 1967, pp. 4-5.)

[4] For a more detailed description of the sampling procedure, see Appendix B.

Except for unemployment rates, percentages in all tables have been rounded to the nearest whole percentage point. To record them to the nearest tenth would clutter up the tables unnecessarily and create the impression of a degree of accuracy that does not in fact exist. To be statistically significant, differences in percentages in this study generally have to be at least several percentage points; thus, there is not much purpose in expressing percentages to the nearest tenth of a point. We have excepted unemployment rates from this general rule since they usually are low while the base is quite large resulting in very small standard errors; hence very small differences may be significant.

With rare exceptions, our tables involve at least three-way cross-classifications in which color is almost always one of the variables. Our purpose generally is to ascertain how an independent variable interacts with color to "explain" some aspect of labor market behavior. For example, are educational attainment and unemployment experience related in the same way for black youth as for white youth? Since we are much more interested in this type of question than in the relation between two variables for the total population irrespective of color, most of our tables omit the totals for blacks and whites combined. It might be mentioned that, because of the overwhelming numerical importance of the whites, the distribution of the total population by any variable resembles very closely the distribution of the whites. Only in Chapter 2, where we describe certain basic demographic, social, and economic characteristics of the entire age cohort, are totals presented for the two color groups combined.

Percentages are shown in all table cells no matter how small the base (and, thus, no matter how statistically unreliable the percentage may be). As a result, there are instances in which the data appear to show a relationship which almost certainly is not real. In our interpretations, of course, we are mindful of sampling error and, as a rough rule of thumb, we are inclined not to say anything about percentages based upon fewer than 50 sample cases, because sampling error in such cases may be very high. For example, the standard error of a percentage in the neighborhood of 50 is about 10 percentage points when the base is 50 sample cases; for percentages near 5 or 95, the standard error is about 4 percentage points. The reader who wishes to observe the same cautions in interpreting the tables should keep in mind that the "blown up" population figure corresponding to 50 sample cases is approximately 188 thousand for whites and about 68 thousand for blacks.

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[5] In Appendix D, we present, for each major variable in the study, the total number of persons in the relevant universe and the number and proportion of persons for whom no information was obtained. Nonresponse rates exceed 10 percent in only very few variables.

As has been indicated, the survey on which the present report is based is the initial stage of a longitudinal study covering a five-year period. Five additional surveys of the same sample of men will be conducted in the autumn of each year through 1971. In these subsequent surveys, the first two of which already have been conducted, detailed information on educational status, current labor force and employment status, labor market experience, and income during the preceding 12 months will be obtained. Thus, at the end of the five years, a complete educational and work history for the period will have been accumulated, along with a record of changes in such other variables as health, marital status, number of dependents, job attitudes, and job aspirations, which are hypothesized to influence educational and labor market decisions.

A longitudinal population study has two essential characteristics. First, it involves measurement or description of one or more characteristics of the same group of individuals at two or more points in time.[6] Second, it involves analysis of relationships among the characteristics of these individuals at different times or of changes in one or more of their characteristics over time.

It should be noted that whether a study is longitudinal is independent of whether data are collected periodically. Making an annual survey of a group of individuals does not assure, in itself, a longitudinal study; nor is such a study precluded by the fact that only a single survey is conducted. If work experience data are collected annually from a sample of individuals over a five-year period solely for the purpose of ascertaining the total amount of unemployment or the total number of job changes experienced during the period by the respondents, the study is clearly not longitudinal in terms of the definition offered above. On the other hand, if a single survey collects five-year work histories and, if analysis of the data includes comparisons between the labor force status of the respondents in year n and their employment status in subsequent years, or between unemployment experience in year n and job mobility in year n-1, the study is longitudinal even though it does not involve repeated surveys.[7]

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[6] Dankward Kodlin and Donovan J. Thompson, An Appraisal of the Longitudinal Approach to Studies of Growth and Development (monographs of the Society for Research in Child Development, Inc., Vol. XXIII, No. 1, 1958), pp. 8, 25.

Although a longitudinal analysis covering a five-year period thus may be made on the basis of a single survey at the end of the period, there are three major advantages in our plan of conducting annual surveys. First, some types of variables cannot conceivably be measured retrospectively. If a characteristic that is subject to change over time can be ascertained only by an objective measurement (or subjective judgment) made by someone other than the respondent, retrospective measurement of that variable is obviously ruled out.[8] Many attitudinal measures fall into this category.

A second advantage of periodic surveys is that even in the case of information which, from a purely logical standpoint, could be collected retrospectively, validity of the data is frequently impaired by the respondents' faulty recall. The shorter the time period covered by detailed work histories, the more accurate are the responses likely to be, since respondents are likely to forget jobs of short duration or short periods of unemployment when they are queried about work experience over a long period of time.[9] Data on annual income are another case in point. These considerations suggest that even if longitudinal analysis were not contemplated, that is, if the study proposed merely to analyze cumulative labor market experience over a five-year period, there would be distinct advantages in collecting the data annually.

Finally, annual surveys permit the study of certain methodological problems in labor market research that could not be approached by a single survey. The reliability of response to questions about work experience can be tested in the final survey by asking questions that can be checked against responses in previous surveys. As another example, the validity of hypothetical questions or of attitudinal measures as predictors of actual labor market behavior can be tested only through periodic surveys of the same individuals.

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[7] For an example of a rather simple retrospective longitudinal study of unemployment, see University of Michigan Survey Research Center, Persistent Unemployment, 1957-1961 (Kalamazoo: The W.E. Upjohn Institute for Employment Research, 1962). The present report, based only on the initial interview survey, also involves longitudinal analysis in the same sense, since the current labor force and employment status of the respondent is analyzed in the light of his previous work experience.

[8] It is no accident that the most extensive experience with longitudinal studies has been in the field of health, since subjects cannot possibly be expected to be able to report, for example, what their blood pressure was five years ago.

[9] By comparing data collected in 1959 on unemployment experience during the previous 24 months with data collected in 1958 covering the previous 12 months, the University of Michigan Survey Research Center has estimated that the former understated by about 20 percent the number of families affected by unemployment during the two-year period. op.cit., p. 13.

In the longitudinal analysis of our data over the five-year period, we draw a distinction between "static" and "dynamic" variables. The former are the respondent's characteristics that remain constant throughout the five-year period. Obvious examples are color, date of birth, place of birth, area of residence at age 14, and occupation of father when respondent was 14 years old. An important group of variables in this category is all those relating to work experience prior to the initial (1966) survey. For the most part, information on the "static" variables has been obtained in the 1966 survey reported here, although we are, of course, not precluded from adding variables of this kind in subsequent interviews.

The "dynamic" variables include all those subject to change for each respondent during the course of the study. In addition to measures of current labor force and employment status, annual work experience, income, and occupational aspirations, this category includes some of the variables whose effect on labor market behavior and occupational goals is to be studied. Examples are marital status, training, educational attainment, health of the respondent and of his wife, number of dependents, and a set of attitudinal measures.

Reports on each of the follow-up surveys will focus primarily on changes in educational status, labor market status, and educational and occupational goals from 1966, as well as from the year preceding the year in question. Explanations for such changes will be sought not only in terms of the static variables, but also in terms of changes in those dynamic variables which we theoretically expect to influence labor market behavior and plans.

II CONCEPTUAL FRAMEWORK

The most general statement which can be made about the determinants of an individual's activity in the labor market is that it reflects an interaction between the characteristics of the individual and those of his environment. An example might be the length of time it takes a young man to find a job after completing his education. This depends in part upon a bundle of characteristics that determine his attractiveness to potential employers, e.g., education and skills, health and physical fitness, color, initiative, appearance, and age. Some of these may be functionally relevant to job performance; others may reflect employers' hiring preferences that have little or nothing to do with performance.

A second set of "personal" characteristics affecting employment prospects operates to determine the range of possible employers. For example, the circle of friends and acquaintances of the youth and his parents is relevant in this context, since such contacts frequently are instrumental in landing a job. In addition, the young man's knowledge of alternative employment opportunities is important, as well as the vigor and initiative with which he conducts his search for work and his willingness to broaden this search outside his area of residence. Moreover, the youth's hierarchy of preferences for different types of work and different types of economic and noneconomic rewards influences both the kinds of work that he will seek, and the specific jobs that he will consider.

Finally, the young man's economic circumstances also condition the likelihood of his employment. The extent of his assets, his access to income from sources other than working, and the extent and character of his financial obligations, including the obligation to support others, all affect his "staying power" and, therefore,the requirements that he establishes for an acceptable job.

But the young man's labor market experience clearly depends upon environmental factors as well as upon his own characteristics. For any given set of personal characteristics, his unemployment may be expected to be of longer duration in a depressed economy than in a buoyant one. Similarly, the occupational structure of job opportunities relative to his own qualifications is an important factor. Employers' personnel policies and trade unions'policies likewise help to determine how readily he will be able to find a job. Government policies play a role, too. The effectiveness of the public employment service and the availability of public training programs and their conditions of eligibility are illustrative of factors that can affect the employment prospects of a youth embarking upon a work career.

What has been illustrated in the preceding paragraphs with respect to duration of unemployment upon entering the labor market, is equally applicable to all other facets of labor market behavior. Whether interest centers on labor force participation, mobility, or occupational choice, the explanation for the various patterns of observed behavior or experience is to be sought in the relationship between individual and environmental characteristics. The individual makes choices and acts in ways that are conditioned by the total complex of his characteristics. His behavior also is conditioned by his perception of the environment. Even if he is insensitive to or misinterprets environmental factors, they can make his choices irrelevant or, what may be even worse, "punish" him for them. The environment, in other words, plays a dual role in explaining labor market behavior. It conditions the values and perceptions of the individual and, therefore, the choices that he makes, and it imposes real constraints upon his action.

Of course, no single study can be expected to deal with all of the complex factors that are implied by the foregoing paragraphs. This study concentrates mainly on characteristics relating to the supply side of the labor market. In general, we seek to determine the characteristics of young men that are important in accounting for variations in their school and labor market experience and in their plans for the future. Nevertheless, environmental variables are not ignored. For example, observed differences in unemployment among occupational categories of workers may be attributable not only to the fact that the characteristics of workers vary among occupational categories, but also to the fact that demand (environmental) conditions may be quite different among occupational groups. Also, three characteristics of the local areas covered in the study are used as independent variables: size of labor force in the area, level of unemployment, and an index of employment opportunities for youth.

III THE VARIABLES[10]

Dependent Variables

The major dependent variables of this study are labor force participation, unemployment, mobility, job attitudes, knowledge of the labor market, and educational and occupational aspirations. The specific measures of each of these are described below.

Labor force participation Our main measure of labor force participation is the conventional one based upon the individual's activity in the calendar week preceding the time of the interview.[11] The interview questions (Items 37-41) and the coding procedures used for classifying respondents are identical to those currently used in the Current Population Survey.[12] A second measure is total number of weeks in the labor force during the 12-month period preceding the interview. This was ascertained for each respondent by adding the number of weeks that he had worked and the number of weeks that he was on layoff or looking for work during the preceding 12-month period (Items 58-62). While this measure has the advantage of displaying more variation than does labor force status in a single week, it is not based upon as refined a set of measurements as current labor force status, because no careful probes were made to assess the precise activity of the individual in each week of the 12-month period. A third measure of the degree of labor market activity--number of hours worked in the survey week--provides a means of differentiating between full-time and part-time workers (Items 38b-h).

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[10] The item number in parentheses after each variable described in this section refers to the relevant question in the interview schedule, which is reproduced in Appendix F.

[11] For convenience, we call this week to which our measures refer the "survey week."

[12] For a detailed set of definitions, see Employment and Earnings and Monthly Report of the Labor Force, op.cit., pp. 3-33. Although the new labor force definitions had not yet been officially adopted, they were used in the present survey in anticipation of their adoption in order to insure consistency during the five years of the study and comparability with national data from the CPS.

Unemployment Employment status in the week preceding the interview is defined and measured just as it is in the CPS (Items 37-41). For respondents unemployed according to this definition, the duration of that spell of unemployment also was obtained. As in the case of labor force status, an alternative measure is number of weeks unemployed in the 12 months preceding the interview (Items 59-61). This measure has the same advantage and disadvantage relative to the measure based on current status as has been described above for the measure of labor force participation based on a year's activity.

Mobility Measures of interfirm, occupational, industrial, and geographic job movement are derived from work history data. Each respondent was asked to identify two jobs (defined as a continuous period of employment with a given employer): the current job, or the most recent for those who are unemployed or out of labor force (Item 42) and the first job after leaving school (Item 66). For each of these, questions were raised which permit classification of the responses according to occupation, industry, length of service, location, method of finding the job, and (except for current job) reason for leaving.

An additional measure of mobility in the sense of propensity or willingness to move is based upon responses to hypothetical job offers. Two questions were asked of employed respondents--one relating to a job within the same community (Item 50), the other to a job elsewhere in the country (Item 51). Respondents were asked how much they would have to be paid in order to be willing to accept each of these jobs, assuming that the type of work was the same as that of the current job. By relating their responses to their current wage rates, respondents have been classified according to their relative willingness to make interfirm and geographic shifts.

Occupational information A three-part test was designed to measure the extent of respondents' information about the labor market. The first part listed a number of occupations, e.g., machinist, stationary engineer, draftsman. For each occupation, three descriptions of job duties were provided from which the respondent was to select the one which best fitted the occupation (Items 67A-1 through 67J-1). Next, the respondent was to indicate how much regular schooling jobholders in each of the listed occupations usually have (Items 67A-2 through 67J-2). In the third part, the respondent was to select from eight pairs of occupations the one in each which had higher average annual earnings (Items 69a-h). In this initial report, we treat the scores on this occupational information test primarily as a dependent variable and seek the factors that appear to explain the amount of labor market information young men possess. To some extent, however, we are able to assess the consequences of differences in labor market knowledge, a matter that will occupy an even more important role in our reports on the follow-up surveys.

Job attitudes This is another factor which is used both as a dependent and an independent variable. On the one hand, we examine the factors which appear to be related to variations in attitudes toward the current job of employed youth. On the other hand, we also examine the effects of such attitudes on labor market behavior. The specific attitudinal measures used are degree of satisfaction with present job (Item 48) and job factors liked best and least (Item 49a and b).

Educational and occupational aspirations With respect to educational goals, respondents who were enrolled in school were asked how much more education they would like to obtain (Item 34a) and how much more they actually expect to get (Item 36a). Questions also were asked pertaining to reasons for planning to discontinue education and, for those planning to attend college, where they planned to attend and the field of study they expected to pursue. To measure occupational aspirations, respondents were questioned about the kind of work they would like to be doing when they reach age 30 (Item 70). Their responses are classified according to the standard Bureau of the Census three-digit occupational classifications. Reasons for the preferred occupations and respondents' perceptions of the chances of actually achieving such occupations also are examined.

Explanatory Variables

From the conceptual framework outlined earlier in this chapter, it is evident that a great many specific attributes of a young man are likely to have a bearing upon his educational decisions, his occupational aspirations, and his labor market activity and experience. Since we cannot, of course, claim to have included all of the relevant variables in this study, we do have a large number of important ones. Nevertheless, we are aware of limitations that exist in the measurement instruments for some of the characteristics with which we are concerned. For example, we originally had planned to include in the interview schedule a number of formal psychological and sociological tests, since much of the variation among individuals in mobility and in other facets of labor market behavior doubtless stems from differences in personality, temperament, and values that have hardly begun to be explored in labor market research. Although it was not possible to administer such scales in the initial survey, at least limited use of them will be made before the study is completed.

For example, the third round of interviews will provide a measure of alienation based upon an abbreviated version of the Rotter Internal-External Scale.[13] In the meantime, in this report we have relied upon simpler attitudinal measures with high face validity. There have been few, if any, studies involving a national sample that have combined as many attitudinal measures with as detailed work status and work experience data as are included here.

In some cases, considerations of cost or feasibility have influenced the kind and amount of information obtained. For example, a high school student's educational aspirations no doubt are influenced to a significant degree by the total school culture to which he is exposed. This embraces not only the formal aspects of the academic organization, e.g., the curriculum, the qualifications and interest of teachers and counselors, and the relevant physical facilities and equipment, but also such informal aspects as the character of peer groups, i.e., their codes, norms of behavior, sanctions, and rewards. Thorough examination of this complex of factors would have required a series of questions at least as long as our total interview schedule. Consequently, we were forced to settle for a brief series of questions in which the respondent was to indicate school subjects liked and disliked, nature and degree of involvement in extracurricular activities, where homework was done, amount of time spent in studying and in extracurricular activities, and his attitude toward his school experience. In addition, a brief questionnaire was mailed to the high school attended by each respondent to obtain information about his scholastic aptitude or intelligence test scores, grade point average, absenteeism, and whether there is any record of disciplinary action.[14] Information about the school, e.g., type, enrollment, library facilities, number of full-time teachers, nature of counselling program, and annual per pupil expenditure for the school system, also was solicited in this mail survey. In short, we have included as many variables and have developed each as well as our ingenuity would permit, given the constraints referred to above. The main explanatory variables are described briefly in the paragraphs that follow.

Formative influences These include a variety of forces that may have been operating during early youth when attitudes, values, and aspirations begin to emerge. Age, for example, reflects both the possible impact of environment and the length of potential exposure to labor force experience. In addition, age is an especially critical factor in this study since many important decisions about employment and education, which will undoubtedly have a major influence upon subsequent labor market successes or failures, are made during the teens and early twenties. Nationality (Items 90, 96, 97) and residence at age 14 (rural, urban, suburban,etc.) (Item 98) are used to measure early cultural influences. With whom living at age 14 (Item 99) differentiates between respondents who were reared in a "normal" situation with both parents present, and those whose early home was "broken" to some degree. Occupation of father (or head of household) when respondent was 14 years old (Item 100); educational attainment of father (Items 103 and 116), of mother (Items 105 and 116); and of oldest living sibling (Items 107, 114, 116) are indicators of the socioeconomic status of the respondent's family. A crude indicator of the quality of early cultural exposure is provided by a question on the availability of books, magazines, and newspapers in the home when the respondent was age 14 (Item 101).

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[13] See Julian B. Rotter, "Generalized Expectancies for Internal Versus External Control of Reinforcement," Psychological Monographs: General and Applied, Vol. 80, No. 1, 1966, pp. 1-28.

[14] Since this school survey was conducted in 1968, results are not yet available for inclusion in this report.

Marital and familial characteristics These refer to the characteristics of both the respondent's parental family and his own family (for those who are married). Family structure may be expected to have considerable influence upon labor market activity. For example, a young man with a wife and children may well react differently to a job loss than one who has no family responsibilities. In order to explore relationships of this kind, we examine the structure of the youth's parental family in terms of number of relatives living in household (Item 110); number of siblings living outside the household (Item 106b); whether or not respondent is the oldest child in the family (Items 106 and 111); and total number of siblings at home attending elementary school, high school, and college (Item 114). The extent of a youth's family obligations is measured by his marital status (Item 112); number of dependents (Item 89); and status (living or deceased) of parents and parents-in-law (Items 94 and 95). The latter, of course, serves also as an indicator of possible financial support. Similarly, for those who are married, the potential and actual labor force participation of the wife are measured by her educational attainment (Items 114 or 116); her labor force activity during past 12 months (Items 118-120); and her health and physical condition (Items 79 and 80). For youth living with their parents, the labor force activity of parents and siblings during the past 12 months is obtained (Items 118-120).

Financial characteristics As is true of many of the factors mentioned above, financial characteristics will influence a young man's educational and occupational goals, as well as his present labor market activity. Among the financial variables we use are current wage rate (Item 42f); income of respondent and of wife (Item 87); total income of all family members in past 12 months (Item 88); net assets (Items 82 through 86); and home and automobile ownership (Items 82 and 85). Actual and potential financial support from "external" sources is measured by financial assistance received (by respondent or his wife) from relatives (Item 81) and kind and amount of financial aid received in college (Item 29h).

Skills Current and past occupations reflect the skills and vocational knowledge that a young man actually has applied. In addition, we use educational attainment (Item 4); type of high school curriculum (Item 23e); field of college degree received (Item 29e); and training received outside regular school (Items 13 through 16 and 21) as measures of potential skill and occupational "know how."

Health and physical condition This characteristic is ascertained from the respondents' answers to a series of questions designed to determine the presence of any health problems that may limit in any way his activity in school, the amount or kind of work that can be done, or any other activities other than school or work (Items 75, 76, 77). If a health problem exists, the nature and duration of the limitation are described (Item 78).

School experience variables A number of questions in the initial interview schedule relate to aspects of school experience. Respondents were asked how well they liked their high school or college work (Items 28 and 32). Their academic interests were identified by questions on high school subjects and college fields of study liked most and least (Items 24, 25, 30, 31). Similarly, college graduates were asked why they majored in a given field of study (Item 29f), while all those with some college were questioned about why they decided to continue their education beyond high school (Item 29k). Respondents who attended high school but not college were queried about their favorite extracurricular activity and the nonschool activity that occupied most of their time during their last full year in school (Items 26g and 27). They also were asked a series of questions relating to the amount of time they spent on homework and the conditions under which it was done (Item 26).

Work attitudes Several attitudes toward job and work role were explored. Satisfaction with current job is measured by response to the question whether the respondent likes his job very much, likes it fairly well, dislikes it somewhat, or dislikes it very much (Item 48). The respondents also were to indicate the factors about their current job that they like and dislike (Item 49). Their responses permit us to discriminate between those who focus mainly upon intrinsic factors, i.e., those related to the inherent nature of the work, and those who emphasize extrinsic factors, i.e., aspects of satisfaction that relate more to the overall job environment, such as wages, hours worked, and social relationships with fellow workers. A similar question, but one which focuses more upon general work role and personal goal orientation, asks about the more important thing in deciding what kind of work one wants to enter--good wages or liking the work (Item 68). Attachment to present employer is measured by response to a hypothetical job offer in the same community (Item 50), while propensity to move geographically is based on reactions to a similar hypothetical job offer in another labor market area (Item 51).

Environmental variables The two main environmental variables considered in this report are size of labor force and unemployment rate. The first refers to the number of persons, as of 1960, in the civilian labor force of the primary sampling unit (PSU) in which the respondent resides. In most cases these areas are SMSA's or individual counties. The second environmental variable refers to the level of unemployment of the PSU in 1960. Areas have been classified into three categories: under 4.2 percent (low unemployment); 4.2 to 6.2 percent (moderate unemployment); and over 6.2 percent (high unemployment).

IV PLAN OF ANALYSIS

In this report we rely exclusively on tabular analysis to seek explanations for variations in the labor market experience and aspirations of youth on the basis of the variables that have been described. As has been indicated, color is used as a major control throughout the analysis, since we are particularly interested in exploring the differences in experiences between white and black youth and in contributing to a better understanding of the sources of the labor market disadvantages of the latter. For the cohort under investigation, school enrollment status and age are two other characteristics which have such a profound influence on labor market activity and are so frequently correlated with other explanatory variables that they generally must be controlled when one seeks to uncover a relationship between some characteristics (e.g., marital status) and a facet of labor market activity (e.g., labor force participation rate). Thus, most of the tables either control for school enrollment status and age or, what amounts to the same thing, relate to only a single age group of students or nonstudents. In effect, therefore, our tables tend to be at least five-way cross-classifications; for example, labor force participation by marital status, school enrollment status, age, and color. Such a table permits us to ascertain whether marital status, age, school enrollment status, and color are associated with labor force participation independently of each other.

However, frequently even this is not enough, since there may be another variable that is known (or suspected) to be correlated both with the dependent and one of the independent variables. For example, in Chapter 6 we shall want to ascertain whether a youth's attachment to his current job is related to his satisfaction with the job. Since it is known that occupation and degree of satisfaction are related and that there is also a relationship between occupation and attachment, it is necessary to examine the relationship between satisfaction and attachment within occupational categories, i.e., to control for occupation. The relevant table, therefore, singles out nonstudents and indicates whether a relation between satisfaction and attachment prevails within each color-age-occupation category--a total of six variables. More generally speaking, where there is reason to suppose that two explanatory variables associated with some aspect of labor market behavior are correlated, the relation of one of the variables is investigated controlling for the other in the manner illustrated above. However, it is clearly impossible to carry this process much beyond what has been described. More complex tables would not only be very cumbersome, but, what is more serious, the small number of sample cases underlying the various entries in the table would make the sampling error so large as to preclude any confident interpretation. Nevertheless, the results of the tabular analysis should go far toward identifying the most influential variables for inclusion in a subsequent multivariate analysis of some of the subjects dealt with in this report.

Chapter 2 presents a description of the demographic and social characteristics of the age cohort of males 14-24 based upon our sample data. These characteristics, e.g., age, educational attainment, health condition, extent of occupational training, and nationality, are among the important explanatory variables that are used in subsequent chapters to account for variations in the labor market behavior and occupational plans of youth. In Chapter 2 the objective is to examine the distributions of the characteristics and to consider some of the interrelations among them.

The determinants of labor force participation and employment status are analyzed in Chapter 3. In addition, comparisons are made with similar data derived from the CPS with the aim of ascertaining the possible influence of the differences between the two surveys in methods of collecting the data. Youth's employment patterns, such as types of jobs held, the number of hours per week worked, rate of compensation, and mobility patterns are studied in Chapter 4. Chapter 5 examines the variation in occupational information among young men and the factors that appear to be related, both as causes and effects, to such variation. Chapter 6 focuses upon attitudes of workers toward their current jobs and the extent of their attachment to these jobs. The educational and occupational aspirations of high school youth and of young men no longer enrolled in school are analyzed in Chapter 7.

The findings and conclusions of the study are summarized in Chapter 8. On the basis of these findings, various hypotheses are presented which are to be tested with the data collected in subsequent surveys. Policy recommendations aimed at ameliorating labor market difficulties of youth are also discussed.

CHAPTER TWO*

DEMOGRAPHIC AND SOCIAL CHARACTERISTICS

Subsequent chapters of this report attempt to account for variations in labor market behavior and plans on the basis of a substantial number of explanatory variables that describe demographic and social characteristics of youth: e.g., marital status, occupation of father, amount and type of education. In the present chapter, we focus on the distributions of some of the explanatory variables and on the interrelations among them. Our purpose is twofold. To begin with, some of these distributions are of interest in their own right. For example, how do white and black youth compare with respect to their reactions to high school? What factors, other than age, appear to differentiate between young men who are enrolled in school and those who are not? A second reason for examining the intercorrelations among the explanatory variables is that this will help to avoid faulty interpretations in later chapters dealing with the determinants of labor market behavior. For example, if teenage youth differ from those in their twenties with respect to a characteristic, e.g., marital status, that bears an independent relationship to some aspect of labor market experience, e.g., labor force participation, it must be recognized that whatever age differences are observed in that aspect of labor market behavior will either overstate or understate the true "effect" of age.

I COLOR AND SELECTED CHARACTERISTICS

Age, School Enrollment Status, and Marital Status

In the autumn of 1966, there were about 16.1 million males between the ages of 14 and 24, of whom about 87 percent were white, in the civilian noninstitutional population of the United States.[1] Within the total group, the average age of whites is somewhat higher than that of blacks. Table 2.1 shows that 56 percent of the whites, as opposed to 51 percent of the blacks, are between the ages of 18 and 24. Of the total age cohort under consideration, 60 percent are enrolled in school

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* This chapter was written by Herbert S. Parnes

[1] In 1960, 60 percent of the total white and 57 percent of the total nonwhite male populations between the ages of 8 and 18 were at least 12 years old.

Table 2.1 Age: Males 14-24 Years of Age, by Color

(Percentage distribution)

Age	WHITES	BLACKS
14-15	23	24
16-17	22	25
18-19	20	16
20-21	14	15
22-24	22	20
Total percent	100	100
Total number (thousands)	14,046	2,041

and 40 percent are not. These proportions are quite different for white and black youth, however, despite the higher average age of the whites, 62 percent of them, but only 53 percent of the blacks are students. As would be expected, the differences are greatest among youth in their twenties, but, nevertheless, exist in all age categories.

Overall, white youth in the age category under consideration are more likely than black youth to be married (Table 2.2). Age for age, there is very little difference among those enrolled in school, but out-of-school white youth in every age category, except the very youngest, are more likely than the black to be married. Among those 20-24, the proportion married is 62 percent of the whites, but only 48 percent of the blacks. Irrespective of color and age, of course, students are less likely than nonstudents to be married. The relative difference between them is smallest in the oldest age category. For example, among white youth 22-24 years of age, 44 percent of the students and 68 percent of those not enrolled in school are married.

Health Condition

About one young man in every seven reports a health problem that affects his school activity, the amount or kind of work he can do, or some aspect of his activity other than school or work (Table 2.3). The proportion of blacks who report such limitations is somewhat smaller than that of whites (11 percent versus 15 percent), and the difference obtains both in the case of students and nonstudents. Among white youth, students are somewhat less likely than those out of school to report health problems, but the differences are substantial only for those in their teens. Among black students, there are no consistent differences in health between those enrolled and those not enrolled in school.

Table 2.2 Marital Status, by School Enrollment Status and Age: Males 14-24 Years of Age, by Color

(Percentage distribution)

Marital status	Enrolled in school						Not enrolled in school						Total					
	14-15	16-17	18-19	20-21	22-24	Total 14-24	14-15	16-17	18-19	20-21	22-24	Total 14-24	14-15	16-17	18-19	20-21	22-24	Total 14-24
	WHITES																	
Married, spouse present	0	0	4	10	44	5	0	9	25	49	68	48	0	2	13	34	63	21
Other	100	100	96	90	56	95	100	91	75	51	32	52	100	99	87	66	37	79
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	3,142	2,589	1,545	739	629	8,644	64	485	1,188	1,249	2,416	5,402	3,206	3,074	2,733	1,988	3,045	14,046
	BLACKS																	
Married, spouse present	0	0	1	11	45	2	0	4	19	36	57	36	0	1	12	31	56	18
Other	100	100	99	89	55	98	100	96	81	64	43	64	100	99	88	69	44	82
Total percent	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	467	394	123	54	41	1,078	24	116	198	259	365	963	491	510	321	313	406	2,041

Table 2.3 Effect of Health on Activity, by School Enrollment Status: Males 14-24 Years of Age, by Color

(Percentage distribution)

Effect of health on activity	WHITES			BLACKS		
	Enrolled in school	Not enrolled in school	Total or average	Enrolled in school	Not enrolled in school	Total or average
Limits activity	14	17	15	11	12	11
Does not limit activity	86	83	85	89	88	89
Total percent	100	100	100	100	100	100
Total number (thousands)	8,644	5,402	14,046	1,079	877	2,041

These results are rather difficult to explain, but may be due to inadequacies in our measures. For one thing, the questions used to categorize respondents by health condition were somewhat different for students and nonstudents.[2] With respect to the health differences between whites and blacks, one possible explanation is that an individual's responses to the health questions reflect two quite different perceptions: (1) the perception of what constitutes "good health," and (2) the perception of his own physical condition. An individual's opinion concerning his health is probably a function of both these perceptions. It seems reasonable to hypothesize that one's notion of what constitutes good health is a function both of cultural factors and of the amount of medical care he receives. If whites receive medical care for more of their ailments than do blacks, then they are perhaps more likely to classify a wider range of ailments as problems.[3]

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[2] For respondents enrolled in school, the opening question in the section on health was, "Do you have any health problems that limit in any way your activity in school?" Those who responded negatively were asked, "Do you have any health problems that limit in any way the amount or kind of work you can do?" If this also was answered in the negative, the final question was, "Do you have any health problems that limit in any way all your other activities?" An affirmative answer to any one of these questions was taken to indicate the presence of a health problem. In the case of nonstudents, questioning began with the second of these three questions.

Educational Characteristics

Age and grade in school Among the young men enrolled in school, there is so close a relationship between age and grade in school that for most purposes they can be used interchangeably in the analysis (Table 2.4). Nevertheless, there is some variation. In all educational categories, except "16 or more," there is more age dispersion among black than among white youth. For every grade level the mean age of blacks is higher than that of whites.

Educational attainment and training of those out of school The fact that the school enrollment ratio has been lower among blacks than among whites means, of course, that educational attainment of those who are out of school is lower for blacks than for whites (Table 2.5). About a third of the white youth not enrolled in school, as compared with almost three-fifths of the black, lack a high school diploma. At the other extreme, 6 percent of the out-of-school white youth, but only 2 percent of the black, have completed four or more years of college.

Black youth who are no longer in school not only have less formal education than their white counterparts, but they are much less likely to have had vocational training outside the regular school system (Table 2.6). Almost half of the whites, but only a fourth of the blacks, have had such training (apprenticeship, company training program, business college, or technical institute, etc.). Typically, training of this kind has been for skilled manual jobs in the case of both whites (48 percent) and blacks

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[3] It has not been possible thus far to put this hypothesis to a rigorous test because of the difficulty of judging the relative severity of health limitations on the basis of the descriptions provided by the respondents. Nevertheless, there is limited evidence to support it. Of all the young men in the sample who reported health limitations, 16.4 percent of the whites, but only 8.9 percent of the blacks described their problem as limiting some activity other than school or work. The proportions of white and black sample cases with health problems affecting only school and/or work are 12.1 percent and 9.9 percent, respectively, as compared with 14.5 percent and 10.9 percent for problems that limit any kind of activity. On the assumption that the reported ailments that do not limit school or work are less serious than those that do, these results are consistent with the notion that white youth are more likely than black to report trivial conditions.

Table 2.4 Year of School Attending, by Age: Males 14-24 Years of Age Enrolled in School, by Color

(Percentage distribution)

Age	8 or less	9-11	12	13-15	16 or more	Mean grade in school (2)
	WHITES					
14-15	98	73	1	0	0	9.9
16-17	2	25	86	18	1	11.5
18-19	0	2	12	56	4	13.6
20-21	0	0	0	17	44	14.9
22-24	0	0	0	9	51	15.2
Total percent	100	100	100	100	100	----
Total number (thousands)	232	3,977	1,342	2,317	776	----
Mean age (1)	14.5	15.1	16.7	18.8	21.6	----
	BLACKS					
14-15	83	62	1	0	0	9.6
16-17	17	35	78	21	0	10.9
18-19	0	3	20	44	0	12.9
20-21	0	0	1	23	44	14.4
22-24	0	0	1	12	56	14.8
Total percent	100	100	100	100	100	----
Total number (thousands)	102	617	165	162	34	----
Mean age (1)	14.8	15.3	16.9	19.0	21.9	----

(1) Means computed from frequency distributions.

(2) Means computed from frequency distributions. The following estimates were used to represent each category: eighth grade or less = 8; high school 1-3 = 10; high school 4 = 12; college 1-3 = 14; college 4 or more = 16.

Table 2.5 Highest Year of School Completed: Males 14-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Highest year of school completed	WHITES	BLACKS
8 or less	12	23
9-11	22	34
12	48	36
13-15	11	5
16 or more	6	2
Total percent	100	100
Total number (thousands)	5,402	963

Table 2.6 Extent of Vocational Training Received outside Regular School: (1) Males 14-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Extent of vocational training	WHITES	BLACKS
None	53	75
1 or more programs(2)	47	25
Total percent	100	100
Total number (thousands)	5,067	942

(1) Excludes college graduates.

(2) In this context, the following are different programs: apprenticeship, company training program, business college or technical institute, and "general courses."

(52 percent) (Table 2.7). Whites are considerably more likely than blacks to have had training for professional or technical jobs (19 percent versus 12 percent).

In the case both of whites and blacks, there is a strong association, at least up to the college level, between the level of school attainment and the probability of the individual's having had vocational training (Table 2.8). Among whites, only one in five of those who left school prior to high school has had training. This proportion rises to two-fifths of those who were high school dropouts and to over half of those who left school with a high school diploma or who went on to take some college work. Among black youth, the likelihood of having had training is lower than for white in every educational attainment category, but, nevertheless, rises continuously from only about a tenth for those with eight or fewer years of school to over two-fifths of those with some college.

High school experience About 90 percent of youth 14-24 years of age who have ever attended high school have gone to public schools. The proportion of whites who have attended private schools is 11 percent, compared with 4 percent of the blacks. White high school youth are about twice as likely as black youth to be enrolled in the college preparatory curriculum (46 percent versus 24 percent), and considerably less likely to be enrolled in the general curriculum (42 percent versus 61 percent). There is not much difference between the two color groups in the proportions enrolled in vocational or commercial curricula. Both of these combined account for only about 12 percent of the whites and 15 percent of the blacks (Table 2.9).

Only a very small proportion of youth enrolled in high school reports a dislike for their high school experience, and the percentage is smaller for black youth (2 percent) than for white (7 percent). Almost three-fifths of the blacks, compared with two-fifths of the whites, report liking their high school experience very much (Table 2.10).[4] The pattern of preferences for the academic courses taken in high school is remarkably similar for black and white youth (Table 2.11). Except for the larger proportion of blacks whose favorite subject is one of the humanities (23 percent of the blacks versus 13 percent of the whites) and the offsetting larger proportion of whites who most enjoyed a vocational subject (20 percent of the whites versus 10 percent of the blacks), there is virtually no difference between the responses of the two groups.

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[4] Black youth are more likely than white youth to have dropped out of school, and dropouts of both color groups are more likely to have reacted unfavorably to high school experience than those who remained in. Nevertheless, among dropouts as well as those in school, the proportion who disliked their school experience is smaller for blacks than for whites.

Table 2.7 Type of Vocational Training Received outside Regular School: Males 14-24 Years of Age Not Enrolled in School, with Some Training,(1) by Color

(Percentage distribution)

Type of training received	WHITES	BLACKS
Professional and technical	19	12
Managerial	2	1
Clerical	9	6
Skilled manual	48	52
Other, general courses	22	29
Total percent	100	100
Total number (thousands)	2,394	232

(1) Excludes college graduates.

Table 2.8 Highest Year of School Completed, by Extent of Vocational Training: Males 14-24 Years of Age Not Enrolled in School(1), by Color

(Percentage distribution)

Extent of vocational training	8 or less	9-11	12	13-15	Total or average
	WHITES				
None	79	59	44	47	53
1 or more programs	21	41	56	53	47
Total percent	100	100	100	100	100
Total number (thousands)	699	1,188	2,573	607	5,067
	BLACKS				
None	91	76	67	57	75
1 or more programs	9	24	33	43	25
Total percent	100	100	100	100	100
Total number (thousands)	227	323	346	46	942

Table 2.9 High School Curriculum: Males 14-17 Years of Age Enrolled in High School or College, by Color

(Percentage distribution)

High school curriculum	WHITES	BLACKS
Vocational	9	11
Commercial	3	4
College preparatory	46	24
General	42	61
Total percent	100	100
Total number (thousands)	5,499	760

Table 2.10 Reaction to High School Experience: Males 14-24 Years of Age Enrolled in High School,(1) by Color

(Percentage distribution)

Reaction to high school	WHITES	BLACKS
Like it very much	42	56
Like it fairly well	52	42
Dislike it somewhat	6	2
Dislike it very much	1	0
Total percent	100	100
Total number (thousands)	4,425	621

(1) Includes only those who have completed at least one year of high school. Over 99 percent of both blacks and whites are between 14 and 19 years of age.

Table 2.11 High School Subject Enjoyed Most: Males 14-24 Years of Age,(1) by Color

(Percentage distribution)

Subject enjoyed most	WHITES	BLACKS
Foreign languages	2	2
Humanities	13	23
Social science	18	19
Science	15	13
Math	23	25
Commercial	4	2
Vocational	20	10
Other	4	2
None	2	2
Total percent	100	100
Total number (thousands)	9,153	1,375

(1) Includes all respondents except those with less than one year of high school and those with one year of college or more.

There are greater differences between whites and blacks, however, with respect to high school subject disliked most (Table 2.12). Black youth are somewhat more likely than white to dislike science and math courses, while whites are more likely than blacks to dislike humanities and social sciences. Black youth are considerably more likely than white to report no subject particularly disliked (22 percent versus 9 percent).

Black youth report spending somewhat more time on their high school homework than white youth. About 31 percent of the whites and 38 percent of the blacks with high school experience but no college, claim to spend, or to have spent, ten hours or more per week on homework. Approximately a third of the whites and fourth of the blacks report less than five hours per week (Table 2.13).

There is a much more substantial difference between the two color groups in where homework usually is done. Whites are divided almost equally between those who generally do their homework in school (47 percent) and those who generally do it at home (48 percent). Black youth, on the other hand, are over twice as likely to do their work at home as in school (64 percent versus 30 percent). About 5 percent of each group generally do their homework somewhere other than at home or school.

Table 2.12 High School Subject Disliked Most: Males 14-24 Years of Age Enrolled in High School,(1) by Color

(Percentage distribution)

Subject disliked most	WHITES	BLACKS
Foreign languages	8	4
Humanities	31	17
Social science	16	12
Science	9	12
Math	21	26
Commercial	1	3
Vocational	1	2
Other	3	3
None	9	22
Total percent	100	100
Total number (thousands)	4,425	621

(1) Includes only those who have completed at least one year of high school. Over 99 percent of whites and blacks are between 14 and 19 years of age.

Table 2.13 Hours per Week Spent on Homework: Males 14-24 Years of Age,(1) by Color

(Percentage distribution)

Hours per week doing homework	WHITES	BLACKS
None	4	3
1-4	29	24
5-9	36	36
10-14	22	26
15-19	7	7
20 or more	2	5
Total percent	100	100
Total number (thousands)	9,153	1,375

(1) Includes all respondents except those with less than one year of high school and those with one year of college or more.

The pattern of extracurricular activity in high school is similar for white and black youth. Almost identical proportions (two-thirds) participate in such activity, and close to half of these devote at least ten hours per week to it (Table 2.14). The types of extracurricular activity enjoyed most by blacks and whites also are quite similar (Table 2.15). Slightly over two-thirds of each group specify sports as their favorite. Black youth are somewhat more likely than white to report music as their favorite extracurricular activity (17 percent versus 11 percent).

Family Background Characteristics

As is well known, there are substantial differences between the types of communities in which white and black youth grow up (Table 2.16). On the basis of their residence at age 14, black youth are more likely than their white peers to reside in large cities (34 percent versus 21 percent) and in rural farm situations (20 percent versus 15 percent). White youth are more likely than black to live in small towns (29 percent versus 20 percent) and in the suburbs of large cities (9 percent versus 3 percent).

There is, of course, a much greater difference between how blacks and whites live than where they live. At age 14, the vast majority of white youth were residing with both their natural parents (85 percent), whereas this was true of only 58 percent of the black youth (Table 2.17). The proportions living with one natural parent and a stepparent are similar for the two groups (about 5 percent), but black youth were more than three times as likely as white youth to be living with their mother alone (22 percent versus 7 percent), three times as likely to be on their own (3 percent versus 1 percent), and seven times as likely to be living with relatives (9.1 percent versus 1.3 percent).

Measured by occupation of father (or other head of household) when the youth was 14, the socioeconomic status of family of origin is profoundly different between blacks and whites (Table 2.18). White youth are over four times as likely as black youth to be from homes headed by professional or technical workers or by managers, proprietors, and officials (27 percent versus 6 percent). They are twice as likely to come from homes headed by skilled manual workers (23 percent versus 12 percent). They are, on the other hand, only a fourth as likely to come from homes of unskilled farm or nonfarm laborers or service workers.

Another indicator of family background that may be particularly important from the standpoint of explaining school enrollment, school achievement, and occupational aspiration is the extent of the youth's exposure to reading material during his formative years. All members of the sample were asked whether, when they were age 14, their families regularly received (1) any magazines, (2) a newspaper, and (3) whether they had a library card (Table 2.19). While this is admittedly a limited

Table 2.14 Hours per Week Spent on Extracurricular Activity: Males 14-24 Years of Age Enrolled in High School,(1) by Color

(Percentage distribution)

Hours spent on activities	WHITES	BLACKS
None	34	32
1-4	18	18
5-9	16	20
10-14	20	14
15-19	9	12
20 or more	4	4
Total percent	100	100
Total number (thousands)	4,425	621

(1) Includes only those who have completed at least one year of high school. Over 99 percent of both whites and blacks are between 14 and 19 years of age.

Table 2.15 Favorite Extracurricular Activity: Males 14-24 Years of Age Enrolled in High School(1) Who Participate in Extracurricular Activities, by Color

(Percentage distribution)

Favorite activity	WHITES	BLACKS
Sports	68	70
Publications	2	1
Dramatics	3	0
Music	11	17
Other clubs	10	10
Other	7	4
Total percent	100	100
Total number (thousands)	2,968	423

(1) Includes only those who have completed at least one year of high school. Over 99 percent of both whites and blacks are between 14 and 19 years of age.

Table 2.16 Residence at Age 14: Males 14-24 Years of Age, by Color

(Percentage distribution)

Residence at age 14	WHITES	BLACKS
Rural farm	15	20
Rural nonfarm	11	10
Town (under 25,000)	29	20
Suburb	9	3
City (25,000-100,000)	15	13
City (100,000 and over)	21	34
Total percent	100	100
Total number (thousands)	14,046	2,041

Table 2.17 Living Arrangement at Age 14: Males 14-24 Years of Age, by Color

(Percentage distribution)

Living arrangement	WHITES	BLACKS
Father and mother	85	58
Father and stepmother	1	1
Mother and stepfather	3	4
Father	1	3
Mother	7	22
Other relative	1	9
Other arrangement	0	0
"On my own"	1	3
Total percent	100	100
Total number (thousands)	14,046	2,041

Table 2.18 Occupation of Father (1) When Youth Was Age 14: Males 14-24 Years of Age, by Color
(Percentage distribution)

Occupation of father	WHITES	BLACKS
Professional, technical	10	4
Nonfarm managers and proprietors	17	2
Clerical	4	4
Sales	6	1
Craftsmen and foremen	23	12
Operatives	17	22
Nonfarm laborers	4	16
Service	4	18
Farmers and farm managers	10	14
Farm laborers	2	7
Armed forces	2	1
Total percent	100	100
Total number (thousands)	14,046	2,041

(1) Occupation of head of household is used if respondent was not living with father.

Table 2.19 Exposure to Reading Material at Age 14: Males 14-24 Years of Age, by Color

(Percentage distribution)

Exposure to reading material	WHITES	BLACKS
Magazines, newspapers, library card	61	32
Lacked any one	27	27
Lacked any two	9	22
Lacked all three	3	20
Total percent	100	100
Total number (thousands)	14,046	2,041

measure, it is nevertheless worthy of notice that white youth are twice as likely as black youth to have had access to all three types of reading material (61 percent versus 32 percent). One in five blacks, as contrasted with less than one in thirty whites, lived in homes into which no magazines, newspapers, or library books regularly came.

Income and Assets

Differences in family structure make it rather difficult to interpret precisely data on total annual incomes of the families of young men 14-24 years of age. In some cases, the family whose income is being measured consists of the young man and his wife; in others, of the young man and his parents; in still others, the youth may be living alone. Since whites and blacks differ with respect to marital status and family structure, the income data must be interpreted cautiously. Nevertheless, the differences between whites and blacks shown in Table 2.20 are impressive. Three-tenths of the black youth, in contrast with less than one-tenth of the white, are in family units with annual incomes under $3,000. At the other end of the continuum, over a third of the white families, but only a ninth of the black, enjoyed incomes over $10,000 per year.

When one looks at the annual income of the young men, the same pronounced differences appear. Table 2.21 presents the picture for youth not enrolled in school. Differences between white and black youth prevail in all age categories, but increase substantially as age increases. Thus, the median income of white youth 16-17 years old ($1,370) is 18 percent higher than that of the same age group of black youth. But for those 18-19 years old, the differential is 51 percent ($2,750 versus $1,818), and for youth in their twenties, 75 percent ($5,257 versus $3,000).

Table 2.20 Total Income of All Family Members in 12 Months Preceding Survey: Males 14-24 Years of Age, by Color

(Percentage distribution)

Total family income	WHITES	BLACKS
Less than $3,000	7	30
$3,000-4,999	12	24
$5,000-7,499	26	21
$7,500-9,999	20	13
$10,000-14,999	22	10
$15,000 or more	13	1
Total percent	100	100
Total number (thousands)	14,046	2,041

II SCHOOL ENROLLMENT STATUS AND SELECTED CHARACTERISTICS

In seeking the determinants of labor market behavior in subsequent chapters we almost invariably shall control for school enrollment status. Students and nonstudents have such markedly different patterns of labor market behavior that they are, in effect, analyzed separately. But this leads to precisely the kind of problem at which the present chapter is directed: since school enrollment status is correlated with labor market behavior, it is important to inquire whether enrollment status perhaps is reflecting the influence on labor market behavior of other factors with which enrollment status is correlated. Actually, there is a more direct way of introducing the subject of this section. We need merely to note that it is somewhat unsatisfying to recognize school enrollment status as a "determinant" of labor market status and activity without inquiring into what factors appear to determine whether a young man is in school.

A complete answer to this question must await our subsequent surveys of the young men when we shall have had an opportunity to observe decisions being made with respect to education and to explore the reasons for them. Also, when information on school records of the youth has been processed, we doubtless shall be in a position to explore the influence of a much wider range of variables than we have available now. Nevertheless, on the basis of data collected in the initial survey, it is possible to perceive a number of variables relating to the background of the youth that affect the likelihood of their being in school.

Table 2.21 Income of Respondent in 12 Months Preceding Survey, by Age: Males 16-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Income of respondent	16-17	18-19	20-24	Total 16-24
	WHITES			
Less than $2,000	73	38	9	21
$2,000 - 3,999	20	32	19	22
$4,000 - 5,999	7	20	35	29
$6,000 - 7,499	0	6	21	16
$7,500 and over	0	4	16	12
Total percent	100	100	100	100
Total number (thousands)	485	1,188	3,665	5,338
Median(1)	$1,370	$2,750	$5,257	$4,483
	BLACKS			
Less than $2,000	86	55	27	40
$2,000 - 3,999	14	33	46	39
$4,000 - 5,999	0	9	18	14
$6,000 - 7,499	0	3	7	6
$7,500 and over	0	0	2	1
Total percent	100	100	100	100
Total number (thousands)	116	198	624	938
Median(1)	$1,163	$1,818	$3,000	$2,513

(1) Computed from grouped data.

Occupation of Father

The socioeconomic status of a youth's family reflects not only its economic circumstances, but also the more intangible aspects of its style of life, and these in turn affect the ability and the desire of the youngster to be in school. It comes as no surprise, therefore, that a young man's school enrollment status is related to the occupation of his father during the youth's formative years.[3] Nevertheless, there are interesting variations in this relationship depending on the age of the young man (Table 2.22). At ages 16 and 17, the relevant school is high school for the overwhelming majority of youth. At higher ages, and particularly those in the twenties, the relevant school is college. Thus, among the 16 and 17 year olds, enrollment status differentiates largely between those who are in high school and those who have dropped out. Among those 18-19 years old and those 20-24, enrollment status differentiates largely between those enrolled in college and those who have not gone that far.

Among white youth 16 and 17 years old, sons of white-collar workers are considerably more likely to be enrolled in school than are those from families headed by other categories of workers; but there is little, if any, difference in enrollment rates among sons of blue-collar, service, and farm workers. In the later teens, however, and in the twenties, sons of farm workers are considerably less likely than youngsters from blue-collar families to be in school. For the entire group of whites 16-24 years of age, 65 percent of the young men from white-collar homes are enrolled, as compared with about 45 percent of those from homes headed by blue-collar or service workers and only 32 percent of those from farm families.

In the case of black youth, among both teenagers and those in their twenties, enrollment ratios appear to decline as one moves from white-collar, through blue-collar and service, to farm occupations. For

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[3] Cf. Charles B. Nam, A. Lewis Rhodes, and Robert E. Herriott, "School Retention by Race, Religion, and Socioeconomic Status," Journal of Human Resources, Vol. III (Spring, 1968), p. 178; Herbert Bienstock, "Realities of the Job Market for the High School Dropout," in Daniel Schreiber (ed.), Profile of the School Dropout (N.Y.: Random House, 1967), pp. 101-125; Vera C. Perella, and Forrest Bogan, "Out-of-School Youth, February 1963," Special Labor Force Report (Part 1), United States Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, Vol. LXXXVII, (November, 1964), pp. 1260-68; Thomas E. Swanstrom, "Out-of-School Youth, February 1963," Special Labor Force Report (Part II), United States Department of Labor, Bureau of Labor Statistics, Monthly Labor Review, Vol. LXXXVII, (December, 1964), pp. 1416-24.

Table 2.22 School Enrollment Status, by Age and Occupation of Father When Youth Was Age 14: Males 16-24 Years of Age, by Color

(Percentage distribution)

Age and school enrollment status	WHITES					BLACKS				
	White collar	Blue collar	Service	Farm	Total or average	White collar	Blue collar	Service	Farm	Total or average
16-17										
Enrolled	92	80	78	79	84	92	76	85	64	77
Not enrolled	8	20	22	21	16	8	24	15	36	23
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,121	1,390	102	269	3,074	36	236	88	72	510
18-19										
Enrolled	73	49	56	35	56	92	34	26	28	38
Not enrolled	27	51	44	65	44	38	66	74	72	62
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,035	1,146	98	283	2,733	37	135	37	67	321
20-24										
Enrolled	43	20	24	13	27	44	13	7	2	13
Not enrolled	57	80	76	87	73	56	87	93	98	87
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,709	2,103	192	699	5,033	76	265	121	182	719
Total 16-24										
Enrolled	65	45	46	32	51	68	41	38	21	39
Not enrolled	34	55	54	68	49	32	59	62	79	61
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	3,865	4,639	392	1,252	10,840	149	636	246	321	1,550

the total 16-24 year age group of blacks, the enrollment ratios for young men whose fathers were in these occupational categories, respectively, are 68 percent, 41 percent, 38 percent, and 21 percent. It is exceedingly important to note that the differences in overall enrollment ratios between blacks and whites are in large measure explained by differences between the two color groups in socioeconomic status of family of origin.[4] For the total age group 16-24, half of the whites, but only two-fifths of the blacks, are enrolled. However, youth from white-collar families are equally likely to be enrolled (about two-thirds) regardless of color. Also, among the sons of blue-collar workers, the difference between enrollment rates of whites and blacks (45 percent versus 41 percent) is minimal. In the service and farm categories, enrollment rates of whites are substantially higher than those of blacks, but the composition of these two categories of occupations differs as between the two color groups to an even greater extent than the other types of occupations.

Type of Community

The type of community in which the youth lived at age 14 bears a substantial relationship to whether he is currently enrolled in school (Table 2.23). Among white youth between the ages of 16 and 24, those with rural farm or nonfarm backgrounds are considerably less likely to be enrolled in school than those from urban communities. Compared with an average enrollment rate of 51 percent for all white youth in this age category, rural farm youth have a rate of 33 percent and rural nonfarm youth a rate of 41 percent. The highest enrollment rate (65 percent) exists among those youth from the suburbs of large cities. Intermediate between these extremes are the enrollment rates of youth from urban areas (about 55 percent). There is virtually no variation according to size of urban area. The pattern for black youth is very much the same as that for white,except that those from rural nonfarm areas are hardly less likely to be enrolled in school than those from urban areas. It is noteworthy that the substantially lower enrollment rates of blacks than of whites do not prevail among those with rural nonfarm backgrounds. Among this group, the enrollment ratio is 41 percent for whites and 40 percent for blacks.

Early Home Environment

Family structure The structure of a youth's family when he was age 14 apparently has a substantial bearing on the likelihood of his

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[4] Nam, Rhodes, and Herriott have reported that one-half of the inter-color difference in enrollment rates in a sample of 3,000 young men and women 16-17 years of age could be accounted for by father's occupational status, and that much of the remaining difference was explained by religion and region of residence. ibid., p. 177.

Table 2.23 School Enrollment Status, by Residence When Youth Was Age 14: Males 16-24 Years of Age, by Color

(Percentage distribution)

School enrollment status	Rural farm	Rural nonfarm	Town	Suburb	City (25,000-100,000)	City (100,000 or more)	Total or average
	WHITES						
Enrolled	33	41	55	65	55	54	51
Not enrolled	67	59	45	35	45	46	49
Total percent	100	100	100	100	100	100	100
Total number (thousands)	1,687	1,135	3,074	1,012	1,555	2,373	10,840
	BLACKS						
Enrolled	26	40	42	61	44	43	39
Not enrolled	74	60	58	39	56	57	61
Total percent	100	100	100	100	100	100	100
Total number (thousands)	333	152	305	42	206	510	1,550

continuing his education (Table 2.24). Among young white men between the ages of 16 and 24, about one-half of those who at age 14 were living with their natural parents currently are enrolled in school, as compared with slightly under two-fifths of all other youth. It is interesting that the relationship in the case of black youth, although in the same direction, is not nearly so strong. The enrollment rate of those who at age 14 were living with their mother and father is 42 percent compared with 37 percent for those in family units with one or both natural parents absent. It should be noted that when one considers only youth from "broken" homes, there is no perceptible difference between whites and blacks in the probability of their remaining in school. The observed relationship between family structure and school attendance may simply be a reflection of differences in financial resources, but it also may reflect the independent effect of the nature of family life on the youngster's motivation and interest in school.

Table 2.24 School Enrollment Status, by Living Arrangement at Age 14: Males 16-24 Years of Age, by Color

(Percentage distribution)

School enrollment status	WHITES			BLACKS		
	Father and mother	All other	Total or average	Father and mother	All other	Total or average
Enrolled	52	38	51	42	37	40
Not enrolled	47	61	49	58	63	60
Total percent	100	100	100	100	100	100
Total number (thousands)	9,310	1,507	10,840	901	642	1,550

Nationality There are fairly substantial differences in the school enrollment rates of white youth between the ages of 16 and 24 depending upon their national origin (Table 2.25). Those whose families have lived in the United States or Canada for at least three generations are less likely to be enrolled in school than those whose families have immigrated more recently from European countries. Native Americans have an enrollment rate of 47 percent compared with 63 percent for youth whose families originated in Central or Eastern Europe, 57 percent for those from Southern Europe, and 54 percent for those from Northern or Western Europe, although the numbers in the latter category are so small as to make this estimated enrollment rate rather unreliable. Youth with recent origins in Latin America are about as likely to be enrolled in school as are those whose families have lived in North America for three generations (48 percent versus 47 percent).

Table 2.25 School Enrollment Status, by Nationality: White Males 16-24 Years of Age (Percentage distribution)

School enrollment status	U.S. or Canada	North or West Europe	Central or East Europe	South Europe	Latin America	Other	Total or average
Enrolled	47	54	63	57	48	53	51
Not enrolled	53	46	37	43	52	47	49
Total percent	100	100	100	100	100	100	100
Total number (thousands)	7,771	206	1,260	933	753	193	10,840

Exposure to reading material Another indicator of early home environment that bears a profound relationship to the probability of a youngster's remaining in school is provided by the data in Table 2.26 which show enrollment rates in relation to the youth's exposure to reading material in his home when he was 14 years of age. White youth between the ages of 16 and 24 whose families had a library card and regularly received a newspaper and magazines, currently have a school enrollment rate of 61 percent, compared to 42 percent for those who lacked any one of these three types of reading material, 27 percent for those who lacked two, and 14 percent for those who lacked all three. It is very curious that for black youth the relationship between these two variables is not nearly so strong as it is for white. For instance, on the basis of this measure, the most culturally deprived white youth is only one-fourth as likely to be enrolled in school as the most privileged youth; but the rate for black youth in the lowest category is more than half as high as the rate for the top category. As a consequence, it is only among the youth with exposure to all three types of reading material that the whites manifest a substantially higher probability of remaining in school than the blacks.

Table 2.26 School Enrollment Status, by Exposure to Reading Material at Age 14: Males 16-24 Years of Age, by Color

(Percentage distribution)

School enrollment status	Had newspaper, magazines, and library card	Lacked one	Lacked two	Lacked all three	Total or average
	WHITES				
Enrolled	61	42	27	14	51
Not enrolled	39	58	73	86	49
Total percent	100	100	100	100	100
Total number (thousands)	6,506	2,944	980	380	10,840
	BLACKS				
Enrolled	50	38	37	28	39
Not enrolled	50	62	63	72	61
Total percent	100	100	100	100	100
Total number (thousands)	482	427	320	308	1,550

In the second category, the enrollment rate for whites is only slightly higher than that for blacks (42 percent versus 38 percent) and, in the two lowest categories, the rates for blacks are actually substantially higher than those for whites. These results are rather puzzling. They suggest that the indicators of cultural environment that we have used do not have the same implications in black families as in white and are perhaps, therefore, not as appropriate a measure for the blacks.

High School Curriculum

There is a substantial relationship between the high school curriculum a youth pursues and the probability of his being in school (Table 2.27). This is, of course, hardly surprising for youth in their late teens and their early twenties since those in college preparatory curricula are obviously much more likely to go on to college. It is noteworthy, however, that the relationship also prevails among those who are 16 and 17 years old. The enrollment rate for white youth in this age group who pursued the college preparatory curriculum is 96 percent in contrast to 81 percent for those in the general curriculum and 82 percent for those in the vocational curriculum. Thus it appears that youth in the general and vocational curricula are not only less likely than those in the college preparatory curriculum to continue their education beyond high school, but they are also more likely to drop out of high school before graduating.[5]

Among the 20-24 year age group, those who had college preparatory work in high school are about two-and-a-half times as likely to be enrolled in school as those in the general curriculum. Perhaps more interesting than this finding, however, is that no high school curriculum is an absolute bar to college enrollment. Approximately one in twelve of the relatively small number of youth between the ages of 20 and 24 in the vocational or commercial curricula in high school is currently enrolled in college. This is true also of almost a fifth of those who had been enrolled in the general curriculum.

The pattern for black youth is very similar to that for whites. It seems clear from the data in Table 2.27 that a substantial portion of the difference in enrollment rates between white and black youth is attributable to the same factors that produce different distributions according to high school curriculum. The overall differential in enrollment rate between black and white youth between the ages of 16 and 24 who have completed at least one year of high school is 9 percentage points (54 percent versus

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[5] Cf. Bienstock, op. cit., p. 122. Of students enrolled in the 12th grade in October, 1959, 4.1 percent of those in the college preparatory curriculum, 12.7 percent of those in the vocational and commercial curricula and 18.3 percent of those in the general curriculum did not graduate with their class.

Table 2.27 School Enrollment Status, by Age and High School Curriculum: Males 16-24 Years of Age With Some High School, by Color

(Percentage distribution)

Age and school enrollment status	WHITES					BLACKS				
	Vocational	ommercial	College preparatory	General	Total or average	Vocational	Commercial	College preparatory	General	Total or average
16-17										
Enrolled	82	93	96	81	87	77	90	89	79	81
Not enrolled	18	7	4	19	13	23	10	11	21	19
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	347	68	1,251	1,239	2,960	63	21	98	270	461
18-19										
Enrolled	30	35	82	42	60	37	50	78	29	43
Not enrolled	70	65	18	58	40	63	50	22	71	57
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	213	80	1,202	1,019	2,592	39	13	66	158	288
20-24										
Enrolled	8	8	51	19	30	16	0	40	11	16
Not enrolled	92	92	49	31	70	84	100	60	89	84
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	363	149	1,717	2,330	4,627	69	15	104	368	575
Total 16-24										
Enrolled	41	35	73	41	54	43	51	67	38	45
Not enrolled	59	65	27	59	46	57	49	33	62	55
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	924	298	4,170	4,589	10,177	171	49	268	796	1,324

45 percent). Between blacks and whites from college preparatory high school curricula, the differential, however, is only 6 percentage points (73 percent versus 67 percent) and, between the two color groups from the general curriculum in high school, the differential is only 3 percentage points (41 percent versus 38 percent). In the case of those who pursue the vocational curriculum in high school, the enrollment rate of the blacks is actually very slightly higher than that of the whites (43 percent versus 41 percent).

Health Condition

The relationship between health and enrollment status is a rather curious one, which at the moment, we are unable to explain (Table 2.28). For the entire age group 16-24, those who report no health problem that affects their school, work, or other activity are slightly more likely to be enrolled than those who have some problem. In the case of the whites, the difference is only 2 percentage points (51 percent versus 49 percent) and, in the case of the blacks, it is 4 percentage points (40 percent versus 36 percent). For both color groups, however, there is a fairly substantial difference among the 18 and 19 year olds. White youth in this age category with no health problems have an enrollment rate of 58 percent, compared with 51 percent for those with problems. Among blacks, the differential is even larger: an enrollment rate of 40 percent for those with no health problems and 29 percent for those suffering some health limitation. Why the differences should be pronounced among the youth in their late teens and scarcely observable among those in their earlier teens and twenties is by no means clear. As has been indicated, there are other respects in which the health variable behaves strangely. It is hoped that our continued exploration of the behavior of this variable will shed some light on the results that have been reported here.

III SUMMARY

There are very dramatic differences between white and black youth with respect to a large number of socioeconomic variables that may be expected to have profound effects on labor market experience and behavior. Blacks are more likely than whites to grow up in rural farm areas and in very large cities rather than in smaller towns or suburbs. They are much less likely than whites to have lived with both their natural parents. In terms of whatever indicator of socioeconomic status one chooses to use, they fall far below whites. As a result, black youth are considerably less likely than white youth to be enrolled in school. If enrolled, they are less likely than whites to be in the college preparatory curriculum and, compared with whites, are not quite so advanced in grade relative to age. Among young men not enrolled in school, blacks are considerably less likely than whites to be married. They have completed fewer years of school, on the average, than whites, and are also less likely to have

Table 2.28 School Enrollment Status, by Age and Effect of Health on Activity: Males 16-24 Years of Age, by Color

(Percentage distribution)

Age and school enrollment status	WHITES			BLACKS		
	Does not limit activity	Limits activity	Total or average	Does not limit activity	Limits activity	Total or average
16-17						
Enrolled	84	84	84	77	77	77
Not enrolled	16	16	16	23	23	23
Total percent	100	100	100	100	100	100
Total number (thousands)	2,623	424	3,074	452	56	510
18-19						
Enrolled	58	51	56	40	29	38
Not enrolled	42	49	44	60	71	62
Total percent	100	100	100	100	100	100
Total number (thousands)	2,192	532	2,733	287	31	321
20-24						
Enrolled	27	28	27	14	10	13
Not enrolled	73	72	73	86	90	87
Total percent	100	100	100	100	100	100
Total number (thousands)	4,223	768	5,033	638	79	719
Total 16-24						
Enrolled	51	49	51	40	36	39
Not enrolled	49	51	49	60	64	61
Total percent	100	100	100	100	100	100
Total number (thousands)	9,038	1,724	10,840	1,377	166	1,550

had vocational training outside the formal educational system. Moreover, the training that black youth receive is less likely than that of white youth to be for white-collar work.

The factors that are related to a young man's enrollment status are substantially the same for whites and blacks. The father's occupation has a marked influence not only on whether a young man goes on to college, but on whether he completes high school. The type of community in which the youngster grows up also is important. Those with rural backgrounds are much less likely to be enrolled in school than those from urban areas. The youth who has grown up in a home with both natural parents present is much more likely to be enrolled than one who has lived in a "broken" home. The cultural environment in which the youth has grown up, as measured by the amount of reading material in the home, bears a strong relationship with the young man's enrollment status, as does the high school curriculum in which he was enrolled. The youth in a college preparatory curriculum is not only more likely than one in the general or vocational curriculum to go on to college, but he is also less likely to drop out of school before receiving his high school diploma. Finally, among white youth, native Americans are less likely to remain in school than those of other nationalities. Needless to say, there are substantial intercorrelations among these variables, and the independent influence that each of them exercises cannot be ascertained until a multivariate analysis is made.

It is highly important to note that much, if not all, of the inter-color difference in enrollment ratios appears to be a reflection of differences between the two color groups with respect to some of the aforementioned underlying variables. For instance, among families headed by white-collar workers, black and white youth are equally likely to be enrolled; among blue-collar families the enrollment ratio of blacks is only slightly less than that of whites. In view of the grossness of the occupational categories and the known differences between blacks and whites in occupational structure within each of the major categories, it seems entirely possible that if one could control completely for occupation of father the enrollment rates of black youth would be as high as, or higher than, those of white.

CHAPTER THREE*

LABOR FORCE AND EMPLOYMENT STATUS

Of the approximately 16 million young men 14 to 24 years of age in the civilian noninstitutional population in 1966, 69 percent are estimated, on the basis of our survey, to have been in the labor force in the autumn of that year. About 10.3 million were employed and 0.8 million were unemployed, an unemployment rate of 7.5 percent. These estimates produced by our longitudinal study (LGS) differ rather substantially from the official estimates yielded for the same age group of young men by the Current Population Survey (CPS). Specifically, the LGS estimates of both employment and unemployment are higher than those of the CPS, by almost 2.1 million in the case of the former and somewhat over 0.3 million in the case of the latter--differences far too large to be reasonably attributable to sampling variation. The pattern of these differences as between students and nonstudents and among different age groups, as well as the possible reasons for them, are explored in Appendix E. In this chapter we describe the labor force and employment status of the young men as registered by the longitudinal survey, and seek to uncover the correlates of labor force participation and unemployment.

I VARIATION IN LABOR FORCE PARTICIPATION

The ages 14 to 24 include a very substantial range in the development and maturation of a young man, particularly from the standpoint of his participation in productive economic activity. In the early teens, the youth is typically just beginning his secondary education; rarely does he have financial responsibilities. Even if he wants to work at all regularly, the vast majority of jobs in the economy are closed to him because of his lack of skills and because of legal impediments such as compulsory school attendance laws and child labor laws. By his mid-twenties, on the other hand, the typical young man has left school, is married, and is working full time.

In addition to the obvious variation by age, there is also considerable variation within narrow age categories in the extent of labor market participation. Among this age group of males, unlike those who are older, there is a considerable element of discretion in labor market activity. Even among the oldest of the cohort, school is not an uncommon activity, and students, even of this age, can remain outside the labor force without sacrificing respectability. On the other hand, there are opportunities for even the youngest students in the age category to work for pay, and many of them do so with greater or lesser regularity. Thus, it is interesting to inquire what characteristics of young men are associated with the likelihood of their being in the labor force.

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* This chapter was written by Herbert S. Parnes and Robert C. Miljus.

School Enrollment Status, Age, and Color

It comes as no surprise that the school enrollment status of male youth shows a stronger relationship to labor force participation than any other single factor we have investigated (Table 3.1). For the total age group, the participation rate is 52 percent for students as opposed to 96 percent for those out of school. This relationship prevails for all age categories, although to somewhat different degrees; among those 22-24 years of age, the difference in participation rates for students and nonstudents is about 28 percentage points, which is smaller than for any other age category. The general pattern is the same for both whites and blacks. Among the latter, the participation rate of students is only half that of nonstudents; but of those 22-24 years of age, the difference is less than 10 percentage points.

Age As is implied by the foregoing, age also has a strong influence on labor force participation. For the total cohort of young men, there is a rather smooth rise in the rate, from 42 percent for those 14-15 years old to 93 percent for the 22-24 year age group (Table 3.1). Among students the rate rises from 41 percent for the 14-15 year olds to 71 percent for those 22-24 years of age. This increase is not continuous, however. The 20-21 year olds have a rate about 4 percentage points below those 18-19. As will be seen below, this probably reflects the lower participation by college students relative to high school students. In the case of youth not enrolled in school, there is a continuous increase from 91 percent for the 16-17 year age group to 98 percent for the 22-24 year olds. Those 14-15 years of age who are out of school are so few in number that the estimate of their labor force participation rate is unreliable. By and large, the relationship between age and labor force participation is similar for black youth.

Color The overall participation rates of white and black male youth are virtually identical, at about 69 percent (Table 3.1). However, when age is controlled, rather pronounced differences appear. Through age 19, the participation rates of the two groups are practically the same. In the 20-21 and 22-24 year age groups, however, the rates for blacks are higher than those for whites by about 7 and 4 percentage points, respectively. When school enrollment status is controlled, as well as age, it turns out that the higher rates for black, as compared with white youth, in their early twenties are attributable primarily to their much lower rate of school attendance. Of men in their twenties who are enrolled in school, it is true that blacks have higher participation rates than whites. But among the much larger proportion of the age group who are not in school, the whites have the higher participation rates. To state

Table 3.1 Labor Force Participation Rates, by School Enrollment Status and Age: Males 14-24 Years of Age, by Color

School enrollment status and age	WHITES		BLACKS		TOTAL	
	Total number (thousands)	Labor force participation rate	Total number (thousands)	Labor force participation rate	Total number (thousands)	Labor force participation rate
Enrolled in school						
14-15	3,142	42	467	40	3,610	41
16-17	2,589	56	394	53	2,983	55
18-19	1,545	60	123	42	1,667	58
20-21	739	54	54	58	793	54
22-24	629	69	41	90	670	71
Total 14-24	8,644	52	1,078	48	9,723	52
Not enrolled in school						
14-15	64	68	24	85	87	72
16-17	485	92	116	85	601	91
18-19	1,188	92	198	92	1,386	92
20-21	1,249	97	259	95	1,509	97
22-24	2,416	98	365	97	2,781	98
Total 14-24	5,402	96	963	94	6,364	96
Total age group						
14-15	3,206	42	491	42	3,697	42
16-17	3,074	62	510	60	3,584	61
18-19	2,733	74	321	73	3,053	74
20-21	1,988	81	313	89	2,302	82
22-24	3,045	92	406	96	3,451	93
Total 14-24	14,046	69	2,041	69	16,087	69

all this in another way, the color differentials in labor force participation among those not in school are small, but rather consistently in the direction of higher rates for whites. Among students, black teenagers have lower rates than whites, but the relationship is reversed for those in their early twenties.

Variation in Rates among Students

Since school enrollment status makes such a substantial difference in the labor force status of young men, it is desirable to separate students and nonstudents for purposes of further analysis. We turn our attention first to young men enrolled in school and inquire what factors are associated with their labor force participation.

Age and year of school

It appears, at least in the case of whites, that age and year in school have independent effects on whether students are in the labor market (Table 3.2). Within each educational category, labor force participation increases with increasing age. However, age for age, college students have substantially lower rates than high school students. For example, among white high school seniors 14-17 years of age, the participation rate is 59 percent as compared with 44 percent for the same age group in the first three years of college. Similarly, the 18-24 year age group of high school seniors (almost all of whom are 18-19 years old) have a rate that is 9 percentage points higher than that of the 18 and 19 year olds who are in the first three years of college. Thus, college students, despite their greater age, are less likely to be in the labor force than high school seniors. Moreover, students in their senior year of college or in graduate work are less likely to be in the labor market than those in their first three years of college. Because of the small numbers of black youth in some of the age-educational attainment categories, the pattern among them is not so clear as in the case of the white.

Educational plans of high school students

The greater tendency of high school students than of college students to be in the labor force is presaged by the fact that college-bound high school students have lower labor force participation rates than their counterparts who do not plan to continue their education (Table 3.3). White students, 14-17 years of age, who aspire to go to college have a participation rate of 47 percent as compared with 51 percent for those who do not, and the difference is even greater in the case of the black youth. There are corresponding differences in the labor force participation of white youth 14-17 years old according to the high school curriculum in which they are enrolled (Table 3.4). Those in the college preparatory curriculum have lower rates than those in general, vocational, or commercial curricula. This relationship, however, does not hold for black students.

Table 3.2 Labor Force Participation Rates, by Year of School Attending and Age: Male Students 14-24 Years of Age, by Color

Year of school attending and age	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
8 or less				
Total 14-24	232	18	102	46
9-11				
14-15	2,895	44	382	39
16-24	1,081	57	232	50
Total 14-24	3,977	47	617	44
12				
14-17	1,169	59	130	52
18-24	172	67	34	62
Total 14-24	1,342	60	165	54
13-15				
14-17	425	44	34	59
18-19	1,287	58	72	33
20-24	604	70	56	75
Total 14-24	2,317	59	162	54
16 or more				
14-21	378	43	15	33
22-24	399	64	19	84
Total 14-24	776	54	34	62
Total or average				
14-15	3,142	41	467	40
16-17	2,589	56	394	53
18-19	1,545	60	123	42
20-21	739	54	54	58
22-24	629	69	41	90
Total 14-24	8,644	52	1,078	48

Table 3.3 Current Labor Force Participation Rates, by Educational Goal: Male Students 14-17 Years of Age, by Color

Educational goal	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
Complete high school or less	1,427	51	292	52
Enter college	4,246	47	566	43
Total or average	5,731	48	861	46

How does one explain these consistent differences between college and high school students and, indeed, between high school students destined for college and those who are not? One plausible explanation is that those who attend or plan to enter college are from higher income families, and that their lower participation results simply from their greater financial resources. Another explantion is that those who are college bound, as well as those already in college, are more serious students and, therefore, less willing to jeopardize their scholastic standing by working. Finally, it is possible that differences in social status between the two groups create different propensities to seek work outside of school.

Marital status By far the most influential determinant of the labor market activity of students is their marital status (Table 3.5). In every age category containing married males, the participation rate of those who are married and living with their wives is substantially greater than that of all others (over 95 percent of whom are "never married"). For example, among whites 22-24 years of age, 82 percent of the former as contrasted with 60 percent of the latter are in the labor force. (The number of black students who are married is too small for reliable estimates.) The higher participation rates of married students prevail irrespective of whether their wives are employed. Although there is only a small number of cases in which the wife of a student is not employed, in no such case is the husband not in the labor force.

Family income From an examination of white male students between the ages of 14 and 24, it would appear that labor force participation varies inversely with family income. The rate declines more or less regularly from 57 percent of those in families whose incomes are under

Table 3.4 Labor Force Participation Rates, by Age and High School Curriculum: Male Students 14-17 Years of Age Enrolled in High School or College, by Color

Age and high school curriculum	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
14-15				
Vocational	170	59	35	35
Commercial	78	62	9	33
College preparatory	1,273	40	90	37
General	1,244	44	237	40
Total or average	2,915	44	384	39
16-17				
Vocational	285	64	49	54
Commercial	63	64	19	11
College preparatory	1,198	47	87	58
General	1,000	64	214	51
Total or average	2,584	56	376	52
Total 14-17				
Vocational	455	62	84	47
Commercial	141	62	28	18
College preparatory	2,471	43	177	48
General	2,244	53	451	45
Total or average	5,499	49	760	46

Table 3.5 Labor Force Participation Rates, by Age, Marital Status and Employment Status of Wife: Male Students 18-24 Years of Age, by Color

Age, marital status and employment status of wife	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
18-19				
Married, spouse present	56	92	1	100
Working	47	90	1	100
Not working	9	100	0	---
Other	1,489	58	122	41
Total or average	1,545	60	123	42
20-21				
Married, spouse present	74	93	6	60
Working	48	90	1	---
Not working	26	100	2	50
Other	665	50	48	58
Total or average	739	54	54	58
22-24				
Married, spouse present	274	82	18	92
Working	220	78	11	87
Not working	49	100	7	100
Other	355	60	22	88
Total or average	629	69	41	90
Total 18-24				
Married, spouse present	404	85	25	84
Working	315	82	13	81
Not working	84	100	9	89
Other	2,509	56	192	51
Total or average	2,913	60	218	55

$4,000 to 49 percent of those in families with incomes of $10,000 or more (Table 3.6). But this relationship probably confounds a number of diverse influences. In the oldest age category, the family whose income is reported frequently consists of the young man and his wife who are living alone; in the youngest category, the family almost always comprises the youngsters, his parents, and siblings.

To avoid the contaminating effects of differences in age, level of schooling, and marital status, one can focus on the students 14-17 years of age. This is a reasonably homogeneous group from the point of view that almost all are in high school, unmarried, and living with their parents. Their own contribution to family income, even when working, is generally minimal. Among whites in this category, contrary to expectation, labor force participation of the youngster is independent of the income of the family. The range of rates is only 4 percentage points--from 47 percent to 51 percent--and even this very limited variation is not systematic with respect to income. In the case of black youth, the rate shows more variation, but behaves quite erratically with respect to income. However, the participation rate of those in families with annual incomes of $6,000 or more is 10 percentage points lower than that in families with lower incomes.

Local unemployment rate The labor force participation of male students appears to be strongly sensitive to the rate of unemployment in the local labor market area. In all age groups, and for both white and black youth, participation in the labor market is much less likely where unemployment rates are high than where they are low (Table 3.7). For the age cohort as a whole, the participation rates of white students are 56 percent in areas where 1960 unemployment rates were under 4.2 percent and 43 percent in areas where 1960 unemployment exceeded 6.2 percent. Among blacks, the corresponding participation rates are 49 percent and 38 percent. These differences suggest a rather pronounced discouraged worker effect among youth enrolled in school.[1]

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[1] Cf. William G. Bowen and T.A. Finegan, "Labor Force Participation and Unemployment" in Arthur M. Ross (ed.), Employment Policy and the Labor Market (Berkely: University of California Press, 1965), pp. 138-142. Another labor market variable used by Bowen and Finegan in their analysis of the factors affecting labor force participation of teenage males was an "index of demand," that is, the percentage of civilian employment in the area accounted for by agriculture and retail trade. These are the two industries which, nationally, employ the largest concentrations of teenage males. In their multiple regression analysis, Bowen and Finegan found a significant positive relationship between this index and labor force participation. In the present study, when PSU's are divided into those with high and those with low levels of demand for teenage employment, no difference in the labor force participation of teenage students is found.

Table 3.6 Labor Force Participation Rates, by Age and Total Family Income in Previous 12 Months: Male Students 14-24 Years of Age, by Color

Age and total family income	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
14-17				
Less than $4,000	592	49	385	48
$4,000-5,999	817	51	182	54
$6,000-7,499	830	48	86	38
$7,500-9,999	1,202	47	100	48
$10,000 and over	1,957	48	64	31
Total or average	5,731	48	861	46
18-19				
Less than $4,000	141	78	41	42
$4,000-5,999	145	54	21	45
$6,000-7,499	172	61	13	50
$7,500-9,999	290	70	20	20
$10,000 and over	692	53	20	35
Total or average	1,545	60	123	42
20-24				
Less than $4,000	150	69	19	63
$4,000-5,999	89	67	12	91
$6,000-7,499	157	74	6	0
$7,500-9,999	192	61	19	95
$10,000 and over	556	49	36	69
Total or average	1,368	61	95	72
Total 14-24				
Less than $4,000	884	57	446	48
$4,000-5,999	1,124	54	215	55
$6,000-7,499	1,158	54	105	37
$7,500-9,999	1,684	52	139	50
$10,000 and over	1,404	49	120	44
Total or average	8,644	52	1,078	48

Table 3.7 Labor Force Participation Rates, by Age and PSU Unemployment Rate in 1960: Male Students 14-24 Years of Age, by Color

Age and PSU unemployment rate in 1960	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
14-17				
Less than 4.2 percent	1,377	53	215	46
4.2-6.2 percent	3,088	48	514	48
More than 6.2 percent	1,266	44	133	37
Total or average	5,731	48	861	46
18-19				
Less than 4.2 percent	401	64	36	43
4.2-6.2 percent	856	55	66	44
More than 6.2 percent	288	37	20	32
Total or average	1,545	60	123	42
20-24				
Less than 4.2 percent	310	60	22	93
4.2-6.2 percent	823	66	53	73
More than 6.2 percent	235	45	20	44
Total or average	1,368	61	95	72
Total 14-24				
Less than 4.2 percent	2,089	56	273	49
4.2-6.2 percent	4,767	54	633	50
More than 6.2 percent	1,789	43	173	38
Total or average	8,644	52	1,078	48

Variation in Rates among Youth Not Enrolled in School

As would be expected, young men who are not enrolled in school are far more homogeneous in labor force status than those who are in school. Nevertheless, almost 5 percent of the total age group out of school are not in the labor force, and there are a number of variables that discriminate between those who are and those who are not.

Age and educational attainment The increasing rate of labor force participation with age already has been pointed out. Table 3.8 indicates that, except for the generally lower participation rates of men with eight or fewer years of school, there is no consistent relationship between educational attainment and labor force participation. For the total age group of whites, those with less than nine years of school have a labor force participation rate of 90 percent; all other educational attainment categories range between 96 percent (those with 16 or more years) and 98 percent (those with 13-15 years).

On theoretical grounds, one would except labor force participation to be positively correlated with educational attainment for at least three reasons. First, education should be positively related to potential earnings, which in turn may be expected to be positively related to labor force participation.[2] Second, one would expect an inverse relationship between education and long-term unemployment (and, therefore, withdrawal from the labor force). Third, the higher the education attainment, the greater the psychic rewards of working, which should lead to higher participation rates. The failure to find a positive relation between educational attainment and labor force participation may result from hidden correlations. Since one expects a positive association between nonlabor income and educational status, and since there are theoretical reasons for expecting nonlabor income to be negatively related to labor force participation, we may obtain a positive relationship between education and labor force participation when we control for total family income, excluding the earned income of the respondent.

Among black youth, the relationship between education and labor force participation is in the expected direction, except that those with less than nine years of schooling have higher participation rates than those with 9 to 11 years of school. It is noteworthy that the somewhat lower overall participation rate of blacks than of whites (2 percentage points) is to some degree the result of differences between the two races in educational attainment. At both ends of the educational attainment

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[2] We recognize that higher wage rates may have an income effect as well as a substitution effect. However, we agree with Bowen and Finegan that when labor supply is measured on an "all-or-nothing" basis by the labor force participation rate (rather than by number of hours), it is reasonable to believe that the substitution effect will predominate. See Bowen and Finegan, op.cit., p. 120n.

Table 3.8 Labor Force Participation Rates, by Age and Highest Year of School Completed: Males 14-24 Years of Age Not Enrolled in School, by Color

Age and highest year of school completed	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
14-17				
8 or less	153	74	50	84
9-11	187	91	66	86
12	209	98	24	88
Total	549	89	140	84
18-19				
8 or less	141	88	33	86
9-11	276	94	75	89
12 or more	772	93	91	98
Total	1,188	93	198	92
20-21				
8 or less	175	100	66	96
9-11	286	98	85	98
12	566	98	88	90
13 or more	223	93	21	100
Total	1,249	97	259	95
22-24				
8 or less	231	92	79	99
9-11	439	100	97	90
12	1,111	99	150	97
13-15	321	99	25	100
16 or more	315	98	15	100
Total	2,416	98	365	97
Total 14-24				
8 or less	699	90	227	92
9-11	1,188	97	323	91
12	2,573	97	346	96
13-15	607	98	46	100
16 or more	335	96	21	100
Total	5,402	96	963	94

continuum, the participation of blacks is higher than that of whites, and among those with high school diplomas the rate for blacks is only 1 percentage point below that of the whites. Only among the high school dropouts is the participation rate of blacks considerably lower than that of whites.

The reasons for the difference between the two color groups in the relationship between education and labor market activity cannot be specified without further analysis. It seems likely, however, that the substantial difference between whites and blacks in the participation rates of the most poorly educated may be attributed to differences in physical and mental capacity. It seems reasonable to hypothesize that those whites who have not gone beyond elementary school include a larger proportion of mentally or physically incapacitated than the corresponding group of blacks. For the latter, economic and social factors are more likely to account for such early termination of education.

Health and physical condition Among young men not enrolled in school, there is a strong relationship between labor force participation and health or physical condition (Table 3.9). White youth with some health problems have a participation rate of 90 percent, compared with 97 percent for those with no such problems. This relationship prevails in all age categories, but becomes attenuated with increasing age. Among the 20-24 year age group, the difference in participation rates between those with health problems and those without is only 4 percentage points. In the case of blacks, although the same relationship exists for the total group, it is not consistent among all age groups. Among those 18-19 years old, those with health limitations show higher participation rates than those without.

Marital status Irrespective of age, marital status is related to labor force participation (Table 3.10). Among white youth 18-19 years old, the difference in participation rates between those who are married and living with their wives and all others is 10 percentage points. This drops to 5 points for those 20-21 and those 22-24. In all three age groups, the participation rate of married men stands at 100 percent. Among the blacks, the pattern is very much the same as among the whites: the difference in participation rates between married and unmarried men exists in all age categories, but is smallest among the oldest. The very sharp differences in labor force participation between married and unmarried men may help to account for the rapid decline in unemployment rates between the late teens and early twenties. Since those continuously in the labor force are likely to experience less frictional unemployment than those who move in and out, the fact that the proportion of married men increases with age thus would account for at least part of the decline in the unemployment rate as age increases.

Table 3.9 Labor Force Participation Rates, by Age and Effect of Health on Activity: Males 14-24 Years of Age, Not Enrolled in School, by Color

Age and effect of health on activity	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
14-17				
Does not limit activity	462	92	124	90
Limits activity	84	70	14	57
Total or average	549	89	140	84
18-19				
Does not limit activity	922	94	174	92
Limits activity	261	86	22	96
Total or average	1,188	93	198	92
20-24				
Does not limit activity	3,084	99	551	99
Limits activity	549	95	71	73
Total or average	3,665	98	624	96
Total 14-24				
Does not limit activity	4,467	97	849	97
Limits activity	894	90	107	73
Total or average	5,402	96	963	94

Table 3.10 Labor Force Participation Rates, by Age, Marital Status and Employment Status of Wife: Males 18-24 Years of Age Not Enrolled in School, by Color

Age, marital status and employment status of wife	WHITES		BLACKS	
	Total number (thousands)	Labor force participation rate, survey week	Total number (thousands)	Labor force participation rate, survey week
18-19				
Married, spouse present	292	100	38	97
Working	151	100	17	100
Not working	117	100	18	95
Other	896	90	161	91
Total or average	1,188	92	198	92
20-21				
Married, spouse present	608	100	92	100
Working	333	100	40	100
Not working	253	100	40	100
Other	641	95	167	92
Total or average	1,249	97	259	95
22-24				
Married, spouse present	1,652	100	210	99
Working	916	100	124	99
Not working	685	100	65	98
Other	765	95	155	94
Total or average	2,416	98	365	97
Total 18-24				
Married, spouse present	2,552	100	340	99
Working	1,400	100	181	99
Not working	1,055	100	123	98
Other	2,302	93	483	92
Total or average	4,853	96	822	95

77

Local unemployment rate The inverse relationship that has been seen to exist between the unemployment level in the community and the labor force participation rate of male students does not prevail in the case of young men who are not in school. The latter, presumably, are likely to be working or looking for work regardless of the level of job opportunities, while youth whose principal activity is school are more likely to be lured into the labor market by abundent opportunities or to be discouraged from seeking work by high unemployment. Among the entire age cohort of whites, variation in labor force participation ranges only from 96 percent to 95 percent as one moves from the labor markets with the lowest to those of the highest unemployment. Among blacks, inexplicably, the relationship is actually the reverse of that postulated by the discouraged-worker hypothesis. The participation rates range from 91 percent in the areas where 1960 unemployment was under 4.2 percent to 96 percent in those with 1960 unemployment of 6.2 percent or more.[3]

II THE INCIDENCE OF UNEMPLOYMENT

The relatively high unemployment rate of young men is one of the chief symptoms of their labor market problems. Nevertheless, male youth are by no means a homogeneous group from the standpoint of the amount of unemployment they experience. In this section we examine some of the factors that are associated with variations in unemployment rates among them.

School Enrollment Status, Age and Color

With some exceptions, unemployment rates of male youth tend to vary systematically according to school enrollment status, color, and age. Except for those 14-15 years old, students in all age categories experience a much higher rate of unemployment than those not enrolled in school (Table 3.11). Among both those in and out of school, the rate is higher for blacks than for whites. Within the total age group of whites the unemployment rate is 11.9 percent for students, but only 3.0 percent for nonstudents. In comparison, black students have a rate of 18.5 percent as contrasted with 5.5 percent for nonstudents.

Unemployment decreases with advancing age, but the relationship is not smooth; the rate drops precipitously beyond a certain age that differs as between students and nonstudents. For students, regardless of color, the sharp drop occurs between the teens and the early twenties: from about 13.0 percent to 4.0 percent in the case of white students and from 21.2 percent to 3.2 percent for the black.

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[3] As in the case of students, participation of teenage youth not enrolled in school is not systematically related to our "index of demand" for teenage labor (see footnote 1, page 57).

Table 3.11 Unemployment Rates, by School Enrollment Status and Age: Males 14-24 Years of Age in the Labor Force, by Color

School enrollment status and age	WHITES		BLACKS		TOTAL	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
Enrolled in school						
14-15	1,312	14.9	185	17.3	1,496	15.2
16-17	1,445	12.9	209	23.9	1,654	14.3
18-19	919	13.4	52	21.2	971	13.8
20-21	400	4.0	31	3.2	432	4.2
22-24	436	3.7	36	2.8	473	3.6
Total 14-24	4,512	11.9	513	18.5	5,026	12.6
Not enrolled in school						
14-15	43	27.9	20	15.0	63	23.8
16-17	447	8.3	98	16.3	545	9.7
18-19	1,099	4.2	184	7.6	1,283	4.7
20-21	1,216	3.0	246	2.4	1,463	2.9
22-24	2,374	1.0	353	3.1	2,729	1.3
Total 14-24	5,179	3.0	902	5.5	6,083	3.4
Total age group		*				
14-15	1,355	~~15.4~~ 31.4	~~205~~ 198	~~17.1~~ 27.3	~~1,560~~ 1693	~~15.6~~ 22.2
16-17	1,890	~~11.7~~ 13.8	~~308~~ 313	~~21.4~~ 23.4	~~2,198~~ 2266	~~13.1~~ 15.7
18-19	2,019	~~8.4~~ 8.3	~~234~~ 233	~~10.3~~ 10.9	~~2,253~~ 2271	~~8.6~~ 9.3
20-21	1,616	~~3.3~~ 3.4	~~277~~ 260	~~2.5~~ 2.9	~~1,894~~ 1894	~~3.2~~ 3.5
22-24	2,811	~~1.4~~ 1.4	~~391~~ 374	~~3.3~~ 3.4	~~3,201~~ 3201	~~1.6~~ 1.6
Total 14-24	9,691	~~7.2~~ 8.7	~~1,415~~ 1408	~~10.8~~ 12.8	~~11,107~~ 11326	~~7.5~~ 9.4

* corrected figures

Among those not enrolled in school, the dividing line between very high and moderately low unemployment rates occurs at an earlier age. Youth 14-17 years of age have much higher rates than those in their late teens and early twenties. In the case of whites, the unemployment rate drops from 10.0 percent for those 14-17 to 4.2 percent for those 18-19. To a considerable extent this doubtless reflects the higher proportion of high school dropouts among the younger age category.

The unemployment rate for black teenagers is greater than that of white, regardless of school enrollment status. In contrast, there is very little difference in unemployment rates between white and black youth in their early twenties. The rate for those 20-24 years of age is less than 4.0 percent for students and nonstudents alike, regardless of color.

Occupation and Industry

Among both students and those not enrolled in school, there are systematic occupational differences in unemployment rates that are somewhat similar to those which prevail for the total experienced labor force in the United States. Operatives and nonfarm laborers have the highest rates; professional and technical, and managerial workers, the lowest (Table 3.12). Students have higher unemployment rates in all occupational categories than those not enrolled in school, and the differences are substantial except in the case of professional and managerial workers. Among white students, there are only two occupational categories (professional-managerial and service) where fewer than 10 percent are unemployed. Among white youth not enrolled in school, all unemployment rates are under 2 percent except for operatives (3.9 percent) and nonfarm laborers (11.4 percent). In the case of black youth, numbers permit reliable comparisons of students and nonstudents only in the operative, laborer, service, and farm categories. In each of these, unemployment rates for students are at least four times as high as for nonstudents, except in the case of laborers, where they are over twice as great.

Industrial variation in the incidence of unemployment is not as great as the variation by occupation (Table 3.13). Among white youth not enrolled in school, the range is from a high of 4.5 percent in construction to a low of 2.0 percent in a miscellaneous category that includes mining, transportation and communications, and finance, insurance, and real estate. In the case of white students, except for construction (29.8 percent), the range is from 9.1 percent (services) to 16.4 percent (manufacturing).

Marital Status

The probability of unemployment among young men seems to be related to their marital status, but the relationship is less consistent for those not enrolled in school than for students (Table 3.14). In the case of students, married youth have lower unemployment rates than their

Table 3.12 Unemployment Rates, by School Enrollment Status and Major Occupation Group: Males 14-24 Years of Age in the Labor Force, by Color

Major occupation group	WHITES		BLACKS	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
	Enrolled in school			
Professional, technical, nonfarm managers, and proprietors	548	2.4	26	0.0
Clerical	519	10.8	38	18.4
Sales	500	12.6	32	15.6
Craftsmen and foremen	244	13.9	18	22.2
Operatives	627	21.0	56	26.8
Nonfarm laborers	833	17.2	117	24.8
Service	755	6.9	138	18.8
Farmers, farm managers, and farm laborers	440	10.0	82	9.8
Total or average	4,512	11.9	513	18.5
	Not enrolled in school			
Professional, technical, nonfarm managers, and proprietors	665	1.4	34	2.9
Clerical	465	1.3	62	3.2
Sales	222	1.8	1	0.0
Craftsmen and foremen	1,088	0.8	106	2.8
Operatives	1,658	3.9	307	6.2
Nonfarm laborers	526	11.4	181	11.0
Service	261	1.1	117	4.3
Farmers, farm managers, and farm laborers	254	0.0	81	0.0
Total or average	5,179	3.0	902	5.5

Table 3.13 Unemployment Rates, by School Enrollment Status and Major Industry Division: Males 14-24 Years of Age in the Labor Force, by Color

Major industry division	WHITES		BLACKS	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
	Enrolled in school			
Agriculture, forestry and fisheries	485	11.5	91	16.5
Construction	198	29.8	20	40.0
Manufacturing	670	16.4	55	29.1
Trade	1,570	9.9	138	13.0
Services, including public administration	1,372	9.1	178	20.0
Other(1)	203	16.2	30	3.3
Total or average	4,512	11.9	513	18.5
	Not enrolled in school			
Agriculture, forestry and fisheries	295	2.7	106	1.0
Construction	533	4.5	96	9.4
Manufacturing	2,060	2.4	315	3.8
Trade	986	4.0	177	6.2
Services, including public administration	848	2.9	151	7.3
Other(1)	455	2.0	55	10.9
Total or average	5,179	3.0	902	5.5

(1) Other includes mining; transportation and communications; and finance, insurance, and real estate industries.

Table 3.14 Unemployment Rates, by Age, School Enrollment Status, and Marital Status: Males 18-24 Years of Age in the Labor Force, by Color

Age and marital status	WHITES		BLACKS	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
	Enrolled in school			
18-19				
Married, spouse present	52	11.5	1	0.0
Other	869	13.7	51	21.6
Total or average	919	13.4	52	21.2
20-21				
Married, spouse present	69	0.0	4	0.0
Other	330	4.8	28	3.6
Total or average	400	4.0	31	3.3
22-24				
Married, spouse present	225	1.3	17	0.0
Other	211	6.2	19	5.3
Total or average	436	3.7	36	2.8
Total 18-24				
Married, spouse present	346	2.6	22	4.5
Other	1,410	10.4	98	13.3
Total or average	1,755	8.8	119	11.0
	Not enrolled in school			
18-19				
Married, spouse present	292	1.7	36	2.8
Other	807	5.1	146	8.2
Total or average	1,099	4.2	184	7.6
20-21				
Married, spouse present	607	3.6	92	0.0
Other	609	2.5	154	3.9
Total or average	1,216	3.0	246	2.4
22-24				
Married, spouse present	1,650	0.9	207	2.9
Other	725	1.1	146	3.4
Total or average	2,374	1.0	353	3.1
Total 18-24				
Married, spouse present	2,549	1.6	335	2.1
Other	2,141	3.0	446	5.2
Total or average	4,689	2.3	783	3.9

unmarried peers; in general, the relationship prevails regardless of age or color. Among white students 18-24 years of age, for example, the unemployment rate is 2.6 percent for those who are married compared with 10.4 percent for all others. Part of this difference, of course, reflects the influence of age, but a substantial portion remains when age is controlled. Among white students 22-24 years of age, the unemployment rate is 1.3 percent for those who are married and 6.2 percent for those who are not.

Among youth not enrolled in school, the relationship between marital status and unemployment depends upon age. In the 20-24 year age group, there is almost no difference between married and unmarried white youth and very little difference in the case of the black. However, among teenagers, regardless of color, married men have lower unemployment rates than those who are not married. The percentage point difference is 3.4 for white youth 18-19 years old and 5.4 for black youth of this age.

Health and Physical Condition

Whether a young man reports a health problem or physical condition that limits his school or work activity in any way might be expected to be related to his unemployment experience for several reasons. For one thing, the range of employment opportunities open to him would probably be somewhat smaller than for a youth without such limitations. Moreover, he might be somewhat less vigorous in his search for work and somewhat less attractive to potential employers. This expected relationship prevails in the case of black youth both in and out of school, but not in the case of white (Table 3.15). Black students with health problems have an unemployment rate of 27.5 percent, compared with a rate of 17.4 percent for those with no health limitation. Among white students, on the other hand, the difference is only 2 percentage points, and in the opposite direction.

Table 3.15 Unemployment Rates, by School Enrollment Status and Effect of Health on Activity: Males 14-24 Years of Age in the Labor Force, by Color

Effect of health on activity	WHITES		BLACKS	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
	Enrolled in school			
Does not limit activity	3,801	12.3	461	17.4
Limits activity	683	10.2	51	27.5
Total or average	4,512	11.9	513	18.5
	Not enrolled in school			
Does not limit activity	4,348	3.1	821	5.1
Limits activity	802	2.4	78	10.3
Total or average	5,179	3.0	902	5.5

In the case of youth not enrolled in school, there is again a difference in the expected direction among black youth. Those with health problems are twice as likely to be unemployed as those without such problems (10.3 percent versus 5.1 percent). In contrast, for the total age group of whites there is no difference in unemployment rate between those who report health problems (2.4 percent) and those who do not (3.1 percent). It is very interesting, however, that a rather strong relationship exists among whites 14-17 years of age. In this age group, youth with health problems have an unemployment rate of 20.3 percent compared to 8.7 percent for those without health problems. Although presently available tabulations do not permit a confident interpretation of this finding, a possible explanation is that white youth under age 18 who are not enrolled in school include a disproportionately high number of individuals with *serious* mental or physical limitations.

Previous Unemployment

The fact that the incidence of unemployment varies so substantially among persons with different demographic and economic characteristics suggests that unemployment may be a repetitive experience for many who suffer it. The data in Table 3.16 provide strong evidence that this is in fact the case. For both students and nonstudents, and among both color groups, the likelihood of current unemployment increases with the amount of unemployment experienced in the past 12 months. Not much importance can be attached to the fact that current unemployment rate is very much higher for those who have had *some* unemployment during the past 12 months than for those who have not, since very frequently the same spell of unemployment is involved. But the fact that the current rate is higher for those with *two or more* spells of unemployment in the past 12 months than for those with only one spell establishes unambiguously the "repeater" phenomenon: those currently unemployed who had at least two spells of unemployment in the past 12 months must have had at least one spell distinct from the current one. The relationship is clear for all groups except the black youth enrolled in school, where small numbers of cases make a confident conclusion impossible.

Educational Attainment and Training

As would be expected, the incidence of unemployment among youth no longer in school decreases as educational attainment increases, but there is a very interesting interaction between number of years of school completed and age (Table 3.17). High school dropouts experience very high rates of unemployment in the period immediately following their departure from school, but the disability, at least as reflected in the unemployment rate, is not a permanent one. For example, white youth between the ages of 14 and 17 who have left high school without a diploma have an unemployment rate of 16.8 percent. In the 18-19 year and the 20-24 year age categories, however, white high school dropouts have unemployment rates of around 2 percent. The much higher rates of the younger teenagers are doubtless due, at least in part, to their ineligibility under child labor laws for many types of employment, and perhaps also to their greater liability to the draft. Among blacks the pattern is similar, except that the relative disability imposed by less than a completed high school education is longer lasting.

Among young men who left school with eight or fewer years of education, whites have higher unemployment rates than blacks (6.7 percent versus 2.9 percent). It will be recalled that white out-of-school youth in this educational attainment category also were less likely than the black to be in the labor force. Our hypothesis, relevant to both these relationships, is that white youth with eight or fewer years of education are more likely than the black in this category to have serious mental or physical disabilities. Another factor that may be responsible for part of the difference is the larger proportion of black youth than of white youth who reside in rural farm areas, where opportunities for employment of those with very limited educations are greater than in urban areas.

Table 3.16 Unemployment Rates, by School Enrollment Status and Number of Spells of Unemployment in Past 12 Months: Males 14-24 Years of Age, in the Labor Force with Work Experience in Past 12 Months, by Color

Spells of unemployment	WHITES		BLACKS	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
	Enrolled in school			
None	3,383	6.4	374	13.4
One	539	25.2	70	35.7
Two or more	307	36.5	43	23.2
Total or average	4,446	10.8	506	17.6
	Not enrolled in school			
None	3,948	0.7	602	1.2
One	524	10.3	117	12.0
Two or more	299	20.1	111	22.5
Total or average	5,165	2.8	897	5.4

There is limited evidence that unemployment experience of young men not enrolled in school is related not only to the amount of education they have had, but to the curriculum they pursued in high school (Table 3.18). The analysis is confined to the group 16-19 years of

Table 3.17 Unemployment Rates, by Age and Highest Year of School Completed: Males 14-24 Years of Age in the Labor Force and Not Enrolled in School, by Color

Age and highest year of school completed	WHITES		BLACKS	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
14-17				
Less than 12	285	16.8	99	15.2
12	204	0.0	21	19.0
Total or average	490	10.0	118	16.1
18-19				
Less than 12	383	1.0	95	12.6
12 or more	716	6.0	89	2.2
Total or average	1,099	4.2	184	7.6
20-24				
Less than 12	1,108	3.2	312	3.8
12	1,653	0.7	223	2.2
13-15	509	2.6	40	0.0
16 or more	323	0.0	21	0.0
Total or average	3,590	1.7	599	2.8
Total 14-24				
Less than 12	1,774	4.9	505	7.7
12	2,488	1.8	330	3.3
13-15	593	3.7	46	0.0
16 or more	323	0.0	21	0.0
Total or average	5,179	3.0	902	5.5

of age who have had some high school in order to control to some extent for educational attainment. In other words, most of the group tabulated are high school graduates who have not gone on to college, although high school dropouts also are included, as are some who may have had a year or two of college.

Table 3.18 Unemployment Rates, by High School Curriculum: Males 16-19 Years of Age, in the Labor Force and Not Enrolled in School,(1) by Color

High school curriculum	WHITES		BLACKS	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
Vocational	195	4.1	36	13.9
Commercial	58	0.0	9	0.0
College preparatory	253	1.6	22	4.5
General	781	6.9	151	13.9
Total or average	1,327	4.9	228	11.8

(1) Includes only those respondents who have completed at least one year of high school.

Both white and black youth who had been enrolled in college preparatory courses are less likely to be unemployed than those from most other curricula. Absolute numbers are large enough for comparison in the case of whites who had been in college preparatory, general, and vocational curricula. Those in the college preparatory curriculum have an unemployment rate of only 1.6 percent, compared with about 4 percent for those in the vocational curriculum and around 7 percent for those in the general curriculum. The pattern for blacks is similar.

These differences are almost certainly in part a reflection of differences in educational attainment, since dropout rates are considerably lower among high school students in the college preparatory curriculum than in the other curricula. Nevertheless, careful comparison of the relationship between educational attainment and unemployment and the relationship shown here between high school curriculum and unemployment points to the conclusion that the latter is at least in part independent of educational attainment. It seems likely that this relationship reflects a selective process in which qualitatively superior students are more likely to enter the college preparatory high school curriculum, even when they do not go on to college.

Whether a young man has vocational training in addition to his regular schooling also may make some difference in his unemployment experience, although the evidence at this point is not completely consistent (Table 3.19). Teenage whites who have had some training have an unemployment rate almost two points lower than those who have had none. Among whites in their twenties, there is virtually no difference between those who have had one program and those who have had none.

Black youth with some training are only a third as likely to be unemployed as those with none. The respective unemployment rates are 12.3 and 4.0 for those in their teens and 3.6 and 1.2 for those in their twenties. These data are consistent with the hypothesis that the vocational training youth receive outside of regular school tends to reduce the risk of unemployment--more so for teenagers than for those in their twenties, and more so for blacks than for whites.

Methods of Job Search

The methods whereby unemployed male youth seek jobs are not substantially different from those used by the total male labor force. The emphasis is primarily on informal means rather than formal institutions such as employment agencies (Table 3.20). Youth not enrolled in school are less likely than students to rely on a single method of seeking work. Larger proportions of nonstudents use a combination of methods and smaller proportions rely exclusively on contacting employers. Those not enrolled in school also are more likely than students to use the public employment service.

In the case of students, there are no substantial differences between the job-seeking methods of whites and blacks. For both groups the principal method is checking "directly with employers" (about 45 percent). Comparable proportions of both groups--14 percent of whites and 12 percent of blacks--rely on contacting friends or relatives. More formal methods of job search, e.g., the public employment service or the school employment service, are used by about a tenth of each group. About 21 percent of whites and 24 percent of blacks use some combination of these or other methods. In the case of those not enrolled in school, there are some perceptible differences in methods of job search by blacks and whites. The former are much more likely to use a combination of methods and to turn to the public employment service, but are considerably less likely than the whites to rely exclusively on contacting employers.

Restrictions on Availability for Work

Unemployed young men not enrolled in school were asked whether they imposed any locational restrictions on the jobs they were seeking. About two-fifths of the total age group of both whites and blacks impose such restrictions. But there is a substantial difference between teenage youth and those in their early twenties in this respect. Half of the younger group, but only about a third of the older youth, specify restrictions on where they would be willing to take jobs.

Table 3.19 Unemployment Rates, by Age and Extent of Vocational Training: Males 14-24 Years of Age in the Labor Force and Not Enrolled in School (1), by Color

Occupational training	14-19		20-24		Total 14-24	
	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed	Total number (thousands)	Percent unemployed
	WHITES					
None	1,110	6.5	1,413	1.7	2,523	3.8
1 or more programs	478	4.8	2,141	2.0	2,318	2.6
Total or average	1,588	5.9	3,264	1.8	4,853	3.2
	BLACKS					
None	252	12.3	417	3.6	669	6.9
1 or more programs	50	4.0	161	1.2	210	1.9
Total or average	302	10.9	580	3.1	880	5.7

(1) Excludes college graduates.

Table 3.20 Methods of Looking for Work in Last Four Weeks, by School Enrollment Status: Unemployed Males 14-24 Years of Age, by Color

(Percentage distribution)

Method of looking for work	WHITES	BLACKS
	Enrolled in school	
School employment service	7	10
Public employment agency	3	2
Private employment agency	1	2
Directly with employer	46	45
Places or answers ads.	8	5
Friends or relatives	14	12
Other or combinations	21	24
Total percent	100	100
Total number (thousands)	538	95
	Not enrolled in school	
School employment service	6	0
Public employment agency	10	16
Private employment agency	3	0
Directly with employer	40	22
Places or answers ads	6	0
Friends or relatives	3	4
Other or combinations	31	58
Total percent	100	100
Total number (thousands)	155	50

While blacks are no more inclined to impose restrictions on their availability than whites, the types of restrictions they impose are somewhat more limiting. They are more likely, for instance, to be seeking jobs in the immediate vicinity of their residence or convenient to a public transportation system. These differences between age groups and color groups may very well contribute to the observed differences between them in the incidence of unemployment.

IV SUMMARY

The 14-24 age group of males is extremely heterogeneous from the standpoint of their labor market activity. Within this particular 11-year age span the effect of age on labor force participation is probably more pronounced than in any other 11-year cohort. Among those in their late teens and early twenties, school status is also a powerful source of variation in labor market activity. In addition, the analysis in this chapter has uncovered a number of factors that are systematically related to the labor force participation of young men within age and school status categories: high school curriculum and educational aspirations, marital status, health condition, and local labor market conditions. Of all of the explanatory variables that have been investigated, the most powerful, as would be expected, is whether the young man is enrolled in school. On the average, those who are not are almost twice as likely to be in the labor force in the early autumn as those who are.

Among both students and nonstudents, married men are much more likely to be working or seeking work than those who are unmarried. Older members of the age cohort are more likely to be in the labor force than younger members, although for students this relationship is distorted by the effect of educational level. Age for age, college students are less likely to be in the labor force than high school students. Those who are headed for college are also less likely to be economically active than their peers who plan to leave school with a high school diploma. Nonstudents with health problems are less likely to be in the labor market than those who have no such limitations. Students are considerably more likely to be in the labor force in areas where the labor market is relatively tight than in areas of high unemployment, but young men not enrolled in school do not display the same sensitivity to labor market conditions. Most of these relationships hold for black youth as well as for white. The former have somewhat lower participation rates than whites if they are not in school and have dropped out of high school or if they are students below the college level. All other educational categories of blacks, however, have participation rates about as high as, or higher than, those of whites.

The incidence of unemployment among young men 14-24 years of age also is subject to considerable variation. Students are much more likely to suffer unemployment than those not enrolled in school. Unemployment drops precipitously for students in their twenties and for nonstudents in their late teens. Blacks generally have higher unemployment rates than whites, but the differences are relatively slight among young men in their twenties. Among those out of school, unemployment is inversely related to educational attainment, more noticeably so for blacks than for whites. It also appears that those with occupational training outside of regular school may have lower-than-average unemployment rates. Again, this relationship is clearer in the case of the blacks than of the whites. In part, because of their more regular labor force participation, married youth are more successful than the unmarried in avoiding unemployment. This is true of all age groups of students, but only of the teenage out-of-school youth.

For black youth, health problems increase the probability of unemployment. The fact that the same relationship does not prevail for whites may mean that the two color groups are defining "health problems" differently. This is consistent with our finding that a larger proportion of white than of black youth report health problems.

Many of the relationships that have been found help to explain the much lower unemployment rate of male youth in their twenties than of those in their teens. As compared with teenagers, men in their twenties are more likely to be (1) nonstudents, (2) better educated, (3) married, and (4) white. Each of these characteristics seems to be associated with low unemployment, independent of age. Thus, the observed differences in unemployment between teenagers and youth in their early twenties are produced by these intercorrelations, as well as by what might be thought of as the "direct" effects of age; e.g., older youth are less likely to be newly entering the labor market, are more likely to have experience in finding jobs, and are more likely to have greater seniority in current jobs.

CHAPTER FOUR*

EMPLOYMENT PATTERNS

Having explored the factors that appear to differentiate between those young men who are employed and those who are not, we turn now to the former group and examine the types of jobs they hold, the number of hours they work per week, and rate of compensation. We are interested in ascertaining how employed students differ in these respects from those who are not enrolled in school and in exploring some of the sources of variation within the student and nonstudent groups. In addition, for those not currently enrolled in school, we analyze mobility patterns during the year preceding the survey and during the period since they left school.

I TYPES OF JOBS HELD

Age for age, there are rather profound differences between students and nonstudents in the occupations and industries in which they work and in their distribution as between self-employment and wage and salary status. Within each school enrollment status group, there is also substantial variation by color, age, and educational status.

Occupational Distribution

Irrespective of color, and largely irrespective of age, students are much more likely than those not enrolled in school to be employed in service, farm, labor, and sales occupations and somewhat more likely to be in clerical and professional and technical jobs (Table 4.1). On the other hand, they are less frequently employed as operatives, craftsmen, and managers.

Students White students are much more widely distributed among occupational categories than black, although this is in some measure a reflection of the different age compositions of the two groups (Table 4.1). There are only two of the nine major occupation categories--nonfarm managers and craftsmen--which account for less than a tenth of the total age group of white students. In contrast, there are five categories employing this small a proportion of the blacks.

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* This chapter was written by Ruth S. Spitz and Herbert S. Parnes.

Table 4.1 Major Occupation Group, by Age and School Enrollment Status: Employed Males 14-24 Years of Age, by Color
(Percentage distribution)

Major occupation group	WHITES						BLACKS					
	14-15	16-17	18-19	20-21	22-24	Total 14-24	14-15	16-17	18-19	20-21	22-24	Total 14-24
	Enrolled in school						Enrolled in school					
Professional and technical	3	3	12	37	41	12	0	5	0	4	40	5
Nonfarm managers and proprietors	0	0	4	3	6	2	1	0	4	0	4	1
Clerical	6	7	22	15	22	12	2	5	25	26	12	8
Sales	18	10	8	7	6	11	7	6	3	18	0	6
Craftsmen and foremen	4	5	7	3	9	5	1	7	5	0	0	3
Operatives	8	18	12	15	8	13	10	10	14	9	4	10
Nonfarm laborers	26	22	10	9	4	18	28	27	8	0	0	21
Service	18	23	20	11	4	18	26	22	32	39	39	27
Farmers and farm laborers	19	11	6	1	0	10	25	19	10	5	0	18
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,116	1,259	796	384	420	3,974	153	159	41	30	35	418
	Not enrolled in school						Not enrolled in school					
Professional and technical	0	2	3	4	15	9	0	0	0	3	6	3
Nonfarm managers and proprietors	0	1	1	2	8	4	0	0	0	1	1	1
Clerical	0	10	9	8	10	9	0	8	6	9	7	7
Sales	0	5	2	3	6	4	0	0	0	0	0	0
Craftsmen and foremen	0	14	22	24	22	22	0	7	6	7	21	12
Operatives	28	32	37	37	27	32	10	30	38	33	36	34
Nonfarm laborers	48	20	12	11	5	9	19	19	26	24	13	19
Service	0	9	6	5	4	5	35	16	13	13	12	13
Farmers and farm laborers	24	7	7	4	4	5	36	20	12	10	4	10
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	31	410	1,053	1,179	2,351	5,024	17	82	170	240	342	852

Because of the close relationship between age and educational attainment in the case of students, there is a pronounced association between age and occupation. In the case of white students, for instance, the proportion of professional and technical workers is in the neighborhood of 5 percent for teenagers, but about 40 percent for those in their twenties. Clerical employment also tends to be more prevalent among older than younger students. On the other hand, nonfarm laborers, service workers, and farm workers account for rather sharply declining proportions of employed white students as age increases. Most of these tendencies are manifest also among black students, although the numbers are too small for confident generalization. A notable exception is that the proportion of black students in service occupations tends to increase, rather than to decrease, with increasing age.

Most of the relationships that have been described between the occupation and age of students also are discernible when occupation is cross-classified with year of school (Table 4.2). Further, the occupations in which students in their late teens are employed vary according to their high school curricula (Table 4.3).[1] For example, both white and black students 16-19 years of age in the college preparatory curriculum are about three times as likely as those in the general curriculum to be in white-collar jobs.

Nonstudents There are pronounced differences in occupational structure between white and black youth not enrolled in school (Table 4.1). White youth are far more likely than black to be in professional and technical, managerial, sales, and craft occupations, and much less likely than black to be laborers, farm workers, or service workers. The proportions in clerical and operative occupations are rather similar between the two groups. Over a fourth of the whites, but only a ninth of the blacks, are in white-collar jobs.

The differences in occupation between white and black youth are not primarily a function of differences in number of school years completed (Table 4.2). There are sufficiently large numbers of blacks for reliable comparisons in only two categories: those with under 12 years and those with exactly 12 years of school. Focusing on the latter, we find substantially the same pattern that has been described for the total groups of whites and blacks. A fourth of the white high school graduates, but only a tenth of their black counterparts, are in white-collar jobs. Relatively, almost twice as many whites as blacks are craftsmen, but the proportion of operatives and laborers is half again as high among blacks as among whites.

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[1] Not all these youth are currently enrolled in high school. Of the approximately 40 percent who are in college, the overwhelming majority will have taken the college preparatory course in high school. The table, therefore, reflects to some extent the difference between high school and college students 18-19 years old.

Table 4.2 Major Occupation Group, by Highest Year of School Completed and School Enrollment Status: Employed Males 14-24 Years of Age, by Color

(Percentage distribution)

Major occupation group	WHITES					BLACKS				
	Less than 12	12	13-15	16 or more	Total or average	Less than 12	12	13-15	16 or more	Total or average
	Enrolled in school					Enrolled in school				
Professional and technical	3	12	23	76	12	1	10	16	86	5
Nonfarm managers and proprietors	0	1	5	2	2	0	0	6	0	1
Clerical	6	20	21	12	12	4	15	26	14	8
Sales	13	10	9	2	11	6	7	14	0	6
Craftsmen and foremen	5	14	3	2	5	4	2	0	0	3
Operatives	14	15	10	0	13	11	10	5	0	10
Nonfarm laborers	24	7	9	2	18	26	14	0	0	21
Service	20	17	17	2	18	25	40	31	0	27
Farmers and farm laborers	15	4	3	0	10	23	2	3	0	18
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	2,335	497	972	170	3,974	316	45	49	9	418
	Not enrolled in school					Not enrolled in school				
Professional and technical	2	5	15	62	9	1	0	12	93	3
Nonfarm managers and proprietors	2	5	7	6	4	0	1	3	0	1
Clerical	4	12	14	8	9	5	9	12	7	7
Sales	2	4	8	15	4	0	0	3	0	0
Craftsmen and foremen	24	23	19	4	22	12	12	22	0	12
Operatives	38	34	25	1	32	28	48	23	0	34
Nonfarm laborers	16	7	3	0	9	25	12	14	0	19
Service	7	5	5	1	5	12	16	10	0	13
Farm and farm laborers	6	5	4	2	5	16	2	0	0	10
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,688	2,442	571	323	5,024	466	319	46	21	852

Table 4.3 Major Occupation Group,by High School Curriculum: Employed Male Students (1) 16-19 Years of Age, by Color

(Percentage distribution)

Major occupation group	WHITES					BLACKS				
	Vocational	Commercial	College preparatory	General	Total or average	Vocational	Commercial	College preparatory	General	Total or average
Professional and technical	2	7	10	2	6	0	0	5	4	4
Nonfarm managers and proprietors	4	0	2	0	1	0	0	2	0	1
Clerical	8	0	18	7	12	0	43	16	5	10
Sales	5	7	14	5	9	9	0	11	2	5
Craftsmen and foremen	6	8	3	9	6	26	14	4	3	7
Operatives	24	32	9	20	16	22	0	14	10	11
Nonfarm laborers	17	23	14	22	18	13	14	21	30	24
Service	16	8	24	22	22	22	29	21	27	24
Farmers and farm laborers	18	15	5	12	9	9	0	5	19	14
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	202	52	973	777	2,055	21	7	57	96	189

(1) Includes only those respondents with some high school.

Within each color group, occupational structure is related to educational attainment in the way one would expect. Additional education, however, seems to have different effects for blacks than for whites. The "improvement" in occupational structure attributable to having a high school diploma is greater in the case of whites. On the other hand, if the estimates of occupational distribution for the small numbers of college-trained blacks can be relied upon, and if we use the proportion in white-collar work as the criterion, it would appear that black youth benefit relatively more than white youth from a college degree.

Industrial Distribution

There is a dramatic difference in industrial affiliation between students and those not enrolled in school (Table 4.4). Construction and manufacturing account for about half the out-of-school youth, but for less than a fifth of the students. On the other hand, the trade and service industries employ almost two-thirds of the students in contrast to less than a third of those not in school.

Students Seven out of ten employed students are concentrated in the service-producing industries for both blacks and whites (Table 4.4). Two of the major industry divisions in this category--trade and services--employ two-thirds of all the white students and three-fifths of the black. There are, nevertheless, differences in the industrial deployment of white and black students, which partially reflect differences in the age composition of the two groups. Blacks are less likely than whites to be employed in manufacturing and trade, and more likely to be employed in agriculture.

Age differences in industrial distribution are pronounced among students, with the patterns rather similar for both whites and blacks. Agriculture is a major employer of the very young, but accounts for a very small proportion of students in their twenties. Trade likewise declines in importance as age increases, but not nearly so sharply as agriculture. Even among students in their twenties, trade accounts for over a fifth of total employment. In contrast, manufacturing accounts for an increasing proportion of employed students as age increases, but is by no means negligible even for those under 18 years old.

Nonstudents Except for the larger proportion of blacks than whites employed in agriculture (12 percent versus 6 percent), there are no substantial differences in industrial affiliation between the two color groups of youth not enrolled in school (Table 4.4). This is not so, however, for all age categories. Among the 14-17 year olds, where the differences between whites and blacks appear to be greatest, blacks are nearly three times as likely as whites to be employed in agriculture, but only about half as likely to be employed in manufacturing.

There is some relationship between age and industrial affiliation in both color groups; however, it is more pronounced in the case of blacks. Among both whites and blacks, agriculture accounts for a smaller proportion

Table 4.4 Major Industry Division, by Age and School Enrollment Status: Employed Males 14-24 Years of Age, by Color

(Percentage distribution)

Major industry division	WHITES				BLACKS			
	14-17	18-19	20-24	Total 14-24	14-17	18-19	20-24	Total 14-24
	Enrolled in School				Enrolled in school			
Goods producing	30	27	27	28	33	20	25	30
Agriculture, forestry, and fisheries	16	5	1	11	23	10	2	18
Mining	0	0	1	0	0	0	0	0
Construction	2	4	7	4	4	0	0	3
Manufacturing	11	17	19	14	6	10	23	9
Service producing	70	73	73	71	67	80	75	70
Transportation and public utilities	1	1	4	2	3	4	3	3
Wholesale and retail trade	41	36	21	36	31	25	22	29
Finance, insurance, and real estate	1	3	5	2	0	7	17	4
Services	27	31	41	30	31	31	34	32
Public administration	0	2	2	1	1	12	0	2
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	2,375	796	804	3,974	312	41	65	418
	Not enrolled in school				Not enrolled in school			
Goods producing	56	59	56	57	50	67	57	58
Agriculture, forestry, and fisheries	9	7	5	6	24	16	9	12
Mining	0	0	1	1	0	0	0	0
Construction	12	10	10	10	9	19	8	10
Manufacturing	36	42	40	40	17	33	40	36
Service producing	43	41	44	43	50	33	43	42
Transportation and public utilities	3	4	7	6	4	5	5	5
Wholesale and retail trade	23	27	16	19	19	13	22	20
Finance, insurance, and real estate	2	1	2	2	2	0	1	1
Services	13	7	14	13	16	13	9	11
Public administration	2	2	5	4	8	2	7	6
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	441	1,053	3,530	5,024	99	170	582	852

of employment as age increases. Among blacks only, the reverse relationship exists for manufacturing. For whites, trade accounts for a larger proportion of employment of young men in their teens than of those in their twenties.

Class of Worker

Students Slightly more than four-fifths of employed white students are private wage and salary workers, about a tenth are government employees, about one in twenty is self-employed, and almost the same proportion are unpaid family workers (Table 4.5). Black students have a similar distribution except for a smaller proportion of self-employed (2 percent) and a correspondingly larger proportion of private wage and salary workers (84 percent).

As would be expected, there is a rather strong relationship between class of worker and occupation. For example, in the case of white students, the self-employed are prominent among managers, professional and technical workers, sales workers, and craftsmen; unpaid family workers are most prevalent among farm workers, accounting for a third of the total; and government workers account for large proportions of professional and technical workers (25 percent), clerical workers (15 percent), and service workers (18 percent).

Nonstudents Although self-employment is very limited among out-of-school youth irrespective of their color, whites are nevertheless considerably more likely than blacks to be self-employed--4 percent versus 0.5 percent (Table 4.6). Over three-tenths of white farm workers are self-employed. Government accounts for an above average number of employment opportunities among male youth in three occupational categories: professional and technical, clerical, and service. Among white professional and technical workers and service workers, about a third are government workers; among clericals, 16 percent. For the blacks, the respective proportions are even higher in the professional and technical and clerical categories and only slightly lower in service.

II HOURS OF WORK AND RATE OF PAY

Hours Worked in Survey Week

The most important single influence on the number of weekly hours worked by male youth is, of course, whether or not they are enrolled in school. Irrespective of color, more than four-fifths of the students work part time, i.e., under 35 hours a week, as contrasted with under one-fifth of the out-of-school youth (Table 4.7). White students are seven times as likely as those out-of-school to work part time; black students, over four times. These patterns tend to prevail irrespective of occupational category (Tables 4.8 and 4.9).

Table 4.5 Class of Worker in Current Job, by Major Occupation Group: Employed Males 14-24 Years of Age Enrolled in School, by Color

(Percentage distribution)

Class of worker	Professional and technical	Nonfarm managers, proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm laborers	Total or average
	WHITES									
Wage and salary	89	64	99	87	87	98	98	96	62	90
Private	64	58	84	87	78	94	97	78	60	81
Government	25	5	15	0	9	4	1	18	1	9
Self-employed	10	36	0	13	9	1	2	3	3	5
Unpaid family worker	1	0	1	0	4	1	1	1	35	4
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	466	69	463	437	210	495	690	703	396	3,974
	BLACKS									
Wage and salary	100	22	100	94	100	96	100	99	72	93
Private	90	22	75	91	94	80	96	84	72	84
Government	10	0	25	3	6	16	4	15	0	9
Self-employed	0	78	0	6	0	2	0	1	3	2
Unpaid family worker	0	0	0	0	0	2	0	0	25	5
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	22	4	31	27	14	41	88	112	74	418

Table 4.6 Class of Worker in Current Job, by Major Occupation Group: Employed Males 14-24 Years of Age, Not Enrolled in School, by Color

(Percentage distribution)

Class of worker	Professional and technical	Nonfarm managers, proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm laborers	Total or average
	WHITES									
Wage and salary	98	82	99	94	97	98	98	97	57	95
Private	62	81	84	94	92	97	89	62	57	86
Government	36	2	16	0	5	2	9	35	0	9
Self-employed	2	18	0	4	2	2	2	3	32	4
Unpaid family worker	0	0	1	2	1	0	0	0	11	1
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	433	223	459	218	1,079	1,593	466	258	255	5,024
	BLACKS									
Wage and salary	100	100	100	100	99	100	100	100	84	98
Private	33	100	81	100	95	98	88	71	84	87
Government	67	0	19	0	4	2	12	29	0	11
Self-employed	0	0	0	0	1	0	0	0	1	0
Unpaid family worker	0	0	0	0	0	0	0	0	15	1
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	28	5	60	1	103	288	161	112	81	852

Table 4.7 Hours Worked during Survey Week, by Age and School Enrollment Status: Employed Males 14-24 Years of Age Who Worked During Survey Week, by Color

(Percentage distribution)

Hours worked	WHITES						BLACKS					
	14-15	16-17	18-19	20-21	22-24	Total 14-24	14-15	16-17	18-19	20-21	22-24	Total 14-24
	Enrolled in school						Enrolled in school					
1-4	19	9	4	3	3	10	16	8	4	0	19	11
5-14	38	32	34	22	9	30	39	32	14	23	22	31
15-34	39	51	45	41	24	43	42	50	58	40	32	46
35-40	2	4	10	14	25	8	1	5	14	32	18	7
41 or more	1	4	7	19	39	9	2	5	10	6	9	5
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,039	1,219	754	359	408	3,780	149	150	38	29	34	401
	Not enrolled in school						Not enrolled in school					
1-34	46	23	20	10	8	12	54	30	28	15	14	19
35-40	3	28	28	30	26	27	10	42	27	37	26	31
41-48	12	26	28	22	25	25	15	10	23	21	34	25
49 or more	39	24	24	38	42	36	22	18	22	27	26	25
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	27	408	1,010	1,163	2,300	4,908	17	77	168	238	328	829

Table 4.8 Hours Worked during Survey Week, by Major Occupation Group: Employed Males 14-24 Years of Age Enrolled in School Who Worked during Survey Week, by Color

(Percentage distribution)

Hours worked	Professional and technical	Nonfarm managers, proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm laborers	Total or average
	WHITES									
1-4	6	0	5	9	10	2	22	11	6	10
5-14	32	21	19	44	26	21	35	39	24	30
15-34	27	28	45	40	36	56	38	42	59	43
35-40	13	11	18	5	7	10	1	6	5	8
41 or more	21	40	14	2	21	10	4	2	6	9
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	433	66	453	428	192	480	674	644	364	3,780
	BLACKS									
1-4	11	0	0	3	0	6	24	17	1	11
5-14	48	100	10	42	28	18	32	35	34	31
15-34	11	0	57	56	43	58	41	41	55	46
35-40	30	0	26	0	0	12	3	5	2	7
41 or more	0	0	7	0	28	6	1	2	9	5
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	20	1	30	27	14	39	88	103	74	401

Table 4.9 Hours Worked during Survey Week, by Major Occupation Group: Employed Males 14-24 Years of Age Not Enrolled in School Who Worked during Survey Week, by Color

(Percentage distribution)

Hours worked	Professional and technical	Nonfarm managers, proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm laborers	Total or average
	WHITES									
1-4	0	0	0	2	0	1	0	0	0	0
5-14	1	0	1	2	3	1	4	4	2	2
15-34	6	3	16	9	8	10	14	17	8	10
35-40	31	15	38	21	30	26	31	21	9	27
41 or more	62	82	46	66	60	62	51	57	81	61
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	429	223	456	214	1,029	1,566	457	249	246	4,908
	BLACKS									
1-4	0	0	0	0	0	0	1	0	2	0
5-14	0	0	5	0	4	1	6	4	2	3
15-34	15	0	19	0	22	8	22	15	22	16
35-40	10	25	46	100	19	33	33	40	20	31
41 or more	75	74	30	0	56	58	38	41	55	50
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	28	5	60	1	100	283	146	111	81	829

Students Among white students, there is a clear and consistent relationship between age and hours worked per week (Table 4.7). Whether one defines short hours as less than five per week, less than 15, or less than 35, the proportion working short hours declines consistently as age increases. For example, almost three-fifths of the 14-15 year age group work under 15 hours per week, in contrast to less than an eighth of those 22-24 years old. On the other hand, only 3 percent of the youngest age category, but almost two-thirds of the oldest, work full time (35 or more hours per week). In only the two youngest categories of black students are there large enough numbers of students for reasonably reliable estimates. It is noteworthy that among both the 14-15 year group and the 16-17 year group the distribution of blacks by hours worked per week is very similar to that of the whites.

It is clear from Table 4.8 that the number of hours per week a student works is not independent of his occupation. In five major occupation groups--professional and technical, managerial, clerical, craftsmen, and operatives--at least a fifth of the employed white students work full time. In the other four--sales, laborers, service, and farm workers--only about 5 to 10 percent work full time. At the other extreme, very short hours, i.e., under five per week, are more common among nonfarm laborers, sales workers, service workers, and craftsmen than in any of the other occupational categories.

Nonstudents A full three-fifths of all out-of-school white youth are working more than the "standard" 40-hour week, while only one-eighth work part time, i.e., under 35 hours per week (Table 4.9). Black youth not enrolled in school work fewer hours than whites. Only half work more than 40 hours per week, and larger proportions of them than whites work part time. These relationships prevail in all age groups.

Within each color group, number of hours worked per week is related positively to age. For example, among whites, the proportion of part-time workers declines from about one-fourth in the case of youth 14-17 years old to under a tenth for those 22-24 years old. In the case of black youth, there is an equally marked difference. In both color groups, the sharpest declines (ignoring the very small group 14-15 years old) occur between the teens and the early twenties.

The hours worked by white youth not enrolled in school vary rather substantially by occupation (Table 4.9). Nonfarm managers and proprietors and farm workers are much more likely than other occupational categories to work longer than 40 hours a week. Sales workers are somewhat more likely to do so. Clerical workers and nonfarm laborers, on the other hand, have smaller-than-average proportions working longer than 40 hours. The differences in hours between whites and blacks are largely independent of differences in their occupational distribution. In all occupational categories in which there are enough blacks for reliable comparisons, smaller proportions of them than of whites work in excess of 40 hours. In most cases, the black youth also have a larger proportion working under 35 hours.

Hourly Rate of Pay: Youth 20-24 Years of Age[2]

The average rate of pay per hour of young men between 20 and 24 years of age not enrolled in school is $2.59 for whites and $1.84 for blacks (Table 4.10).

Occupation Perhaps the most striking aspect of the data is the very limited variation in hourly rate of pay among major occupation groups--far less than those that existed in mid-1966 among men between the ages of 45 and 59.[3] Among the white youth in nonfarm occupations, the lowest hourly rate of pay is for service workers ($2.07) and the highest is for professional and technical workers ($2.87), a relative differential of 39 percent. In contrast, in mid-1966 the differential among white men 45-59 years of age between nonfarm laborers ($2.50) and professional and technical workers ($4.91) was 96 percent. In the case of the youth, the hourly rate of pay for all nonfarm categories, except professional and technical and service, lies within the narrow range from $2.54 (sales) to $2.65 (craftsmen)--a differential of less than 5 percent. The rate structure for the older men stands in sharp contrast; illustrative differentials are 26 percent between operatives and craftsmen and 31 percent between salesmen and managers.

It follows from the foregoing that the age differential in rate of pay between the youth and the older men varies substantially from one occupational category to another. The overall percentage differential in hourly rate of pay between the two age groups of white men is 36 percent ($2.59 for the youth and $3.51 for the older men). This differential is as high as 71 percent in the case of professional and technical workers and 88 percent in the case of managers, but only 5 percent or less in the case of operatives and nonfarm laborers. In the latter occupational category, the youth actually have a slightly higher average rate of pay ($2.56 versus $2.50 for the older males). It seems clear that age makes less difference with respect to rate of earnings in those major occupation groups which are relatively homogeneous with respect to level of skill and

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[2] Hourly rate of pay was computed in the following manner: employed respondents were asked "How much do you usually earn at this job before deductions?" Responses in terms of an hourly rate were coded as given. Responses in terms of a weekly figure were divided by the number of hours usually worked per week in the past 12 months in the case of those who had been out of school for at least 12 months and by number of hours worked during the survey week in the case of those who had been students during the past 12 months. Responses in terms of biweekly, semimonthly, monthly, or annual figures were converted first to weekly data by dividing by the appropriate factor (e.g., 2.2 for semimonthly and 52 for annual) and then treated the same as a weekly wage. Responses in terms of a daily figure were not coded and were considered to be "not ascertained."

[3] Parnes, H. S., et al., The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of the Cohort of Men 45-59 Years of Age, Vol. I (Columbus: The Ohio State University Center for Human Resource Research, 1968), p. 47.

Table 4.10 Mean Hourly Rate of Pay, by Major Occupation Group: Employed Male Wage and Salary Workers 20-24 Years of Age and 45-59 Years of Age,(1) Not Enrolled in School, by Color

Major occupation group	Youth 20-24 years of age		Men 45-59 years of age(1)	
	WHITES	BLACKS	WHITES	BLACKS
Professional and technical	$2.87	(a)	$4.91	$3.40
Nonfarm managers and proprietors	2.60	(a)	4.88	3.18
Clerical	2.57	$1.60	3.23	2.60
Sales	2.54	(a)	3.73	(a)
Craftsmen and foremen	2.65	1.86	3.45	2.65
Operatives	2.60	1.99	2.74	2.24
Nonfarm laborers	2.56	1.79	2.50	2.15
Service	2.07	1.59	2.53	1.95
Farmers and farm laborers	(a)	(a)	1.33	0.88
Average	2.59	1.84	3.51	2.22

(1) Data for men 45-59 years from Parnes, et al., op. cit., p. 52.

(a) Means not shown where sample cases number fewer than 30.

responsibility (e.g., laborers, operatives). In those categories, on the other hand, in which there are relatively large variations in level of skill and responsibility (e.g., sales, craftsmen, professional and technical, and managerial), the older and more experienced men are likely to be in the higher level jobs and thus earn the higher rates of pay.

Color On the average, white youth between the ages of 20 and 24 who are not enrolled in school earn 41 percent more per hour than their black counterparts. A small part of this difference reflects the difference in occupational structure between the two color groups. Nevertheless, there is a substantial differential within every major occupation group containing large enough numbers of each group for reliable comparison. These intra-occupational differentials are in the neighborhood of 30 percent for service workers and operatives, 40 percent for nonfarm laborers and craftsmen, and 60 percent for clerical workers.

Education and training Craftsmen and operatives are the only major occupation groups with large enough numbers of white and black youth to permit a test of the influence of education on hourly rate of pay. In both these occupation groups, young men who have high school degrees earn more than those who do not (Table 4.11). The differentials in favor of the better educated are 12 and 14 percent, respectively, for white craftsmen and operatives and 52 and 27 percent, respectively, for black men in the same two occupational categories. The inter-color difference in average hourly rate of pay, it should be noted, persists when education is controlled, but is less between whites and blacks with 12 or more years of schooling than among those with less education. For example, the black-white differential among craftsmen with 12 or more years of education is 24 percent, but is as great as 68 percent among those with less than 12 years of schooling.

The relationship between the hourly rate of pay of craftsmen and that of operatives, irrespective of education, is rather perplexing. In the case of whites, the differential in favor of craftsmen is exceedingly small (three cents per hour for those with high school degrees and eight cents for those who were high school dropouts). For black youth with high school diplomas, the differential is four cents in favor of craftsmen, but for those with less than high school degrees it is 25 cents in favor of the operatives. The only plausible explanation that comes to mind is that substantial numbers of the youth who reported themselves as craftsmen, in fact are serving in less skilled jobs.[4]

Training outside of the regular school system also appears to contribute to higher earnings, most substantially in the case of operatives, although

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[4] See Appendix E, footnote 6. Some of these are, perhaps, apprentices in a given trade who neglected to designate their apprenticeship status. According to the Census classification system, apprentices should be classed as "operatives" rather than "craftsmen."

Table 4.11 Mean Hourly Rate of Pay of Craftsmen and Operatives, by Highest Year of School Completed and by Extent of Vocational Training outside of Regular School: Employed Male Wage and Salary Workers 20-24 Years of Age Not Enrolled in School, by Color

Education and training	WHITES		BLACKS	
	Craftsmen, foremen	Operatives	Craftsmen, foremen	Operatives
Highest year of school completed				
11 or less	$2.47	$2.39	$1.47	$1.72
12 or more	2.76	2.73	2.23	2.19
Average	2.65	2.60	1.86	1.99
Extent of training outside regular school				
None	$2.57	$2.36	$1.84	$1.87
1 type of program	2.66	2.75	(a)	2.29
2 or more types of programs	2.78	2.94	(a)	(a)
Average	2.65	2.60	1.86	1.99

(a) Means not shown where sample cases number fewer than 30.

the correlation between number of years of education and the presence of training makes it uncertain to what extent education and training have independent effects on earnings (Table 4.11). White youth employed as operatives who have participated in one type of training program earn about 17 percent more per hour than those who have had none. The differential enjoyed by those with two or more programs is 24 percent. Black operatives who have had one type of training program earn 22 percent more than those who have had none.

Health Only among white operatives is there sufficient variation in health to permit an analysis of its effect on wage rate. Within that category, those young men who report no health problems that affect the kind or amount of work they can do earn 46 cents per hour more--about 21 percent--than those who have such health problems. The same kind of relationship was found within virtually all the major occupation groups of men between the ages of 45 and 59.[5]

Size of labor force in local area Comparable to our findings in the case of older men,[6] is the strong positive relationship between hourly wage rate and labor force size in the local area (Table 4.12). The relationship is most pronounced in the case of white craftsmen, where the differential in hourly rate of pay is as much as 37 percent between areas with a labor force under 100,000 and those with a labor force of half a million or more. The differential is 27 percent for black operatives,

Table 4.12 Mean Hourly Rate of Pay of Craftsmen and Operatives, by Size of Labor Force in PSU: Employed Male Wage and Salary Workers 20-24 Years of Age, Not Enrolled In School, by Color

Size of labor force in PSU	WHITES		BLACKS	
	Craftsmen and foremen	Operatives	Craftsmen and foremen	Operatives
Less than 100,000	$2.39	$2.49	$1.50	$1.79
100,000-499,000	2.53	2.77	(a)	2.00
500,000 or more	3.28	2.68	(a)	2.27
Average	2.65	2.60	1.86	1.99

(a) Means not shown where sample cases number fewer than 30.

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[5] Parnes, et al., op. cit., p. 48.

[6] Ibid., pp. 45-48.

but only 8 percent for white operatives. For the latter category, earnings in the largest communities are actually slightly lower than in communities of intermediate size (labor force of 100,000-499,000).

III METHOD OF FINDING CURRENT JOB

Among students and nonstudents alike, employed youth have found their current jobs[7] largely by informal methods (Table 4.13). In each school enrollment status and for both whites and blacks, between 70 and 80 percent report having found their jobs through friends or relatives and by making the rounds of employers. Students are more likely than those not enrolled to have been placed by the school employment service. On the other hand, out-of-school youth are more likely to have found their jobs through the public employment service.

Students

By far the most common method used by students to find their current jobs is through friends and relatives (Table 4.13); almost half of both white and black students cite this method. Another fourth found their jobs by directly contacting employers, and a tenth used the school employment service. No other listed means--public or private employment agencies or advertising--was used by more than 4 percent of either whites or blacks, although an eighth noted some other or a combination of methods.

Among white students, the use of friends and relatives in finding jobs is inversely related to age. The proportion citing this method ranges from two-thirds of the 14-15 year olds to one-third of the 22-24 year olds. Public and private employment agencies and advertisements more commonly are used by older than by younger youth, although each is used by less than 7 percent, even of the oldest group. The greatest use of school employment services is made by 18-19 year olds, about a fifth of whom list this method of job finding.

It is interesting to note that the methods by which employed students have found their current jobs differ in some respects from the methods by which unemployed students are currently seeking work.[8] In the case of both whites and blacks, the unemployed are placing much less reliance on friends and relatives and much more reliance on direct contacts with employers than would seem to be warranted by the experience of the employed. There is also a larger proportion of the unemployed, than of the employed, who report a combination of methods. This is to be expected, however, since the employed are more likely to report only the single method that resulted in their placement.

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[7] "How did you find out about this (i.e., current) job?"

[8] See, Appendix E, Table E-8.

Table 4.13 Method Used to Find Current Job, by Age and School Enrollment Status: Employed Males 14-24 Years of Age, by Color

(Percentage distribution)

Method used to find current job	WHITES						BLACKS					
	14-15	16-17	18-19	20-21	22-24	Total 14-24	14-15	16-17	18-19	20-21	22-24	Total 14-24
	Enrolled in school						Enrolled in school					
School employment service	1	8	19	16	13	10	7	12	15	33	3	11
Public employment agency	0	0	2	3	6	1	1	2	7	24	0	3
Private employment agency	0	0	1	1	3	1	0	0	0	0	0	0
Directly with employer	16	27	23	27	21	22	31	25	16	4	4	23
Places or answers ads.	2	2	4	4	6	3	1	1	2	21	22	4
Friends or relatives	64	52	39	39	35	50	51	50	49	13	51	48
Other or combinations	16	11	11	10	16	13	9	11	10	5	20	11
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,116	1,259	796	384	420	3,974	153	159	41	30	35	418
	Not enrolled in school						Not enrolled in school					
School employment service	0	5	5	5	4	4	0	4	2	2	1	2
Public employment agency	0	2	4	4	5	4	0	3	7	3	14	8
Private employment agency	0	0	1	2	3	2	0	1	0	0	0	0
Directly with employer	23	32	24	22	27	26	28	18	27	20	23	23
Places or answers ads.	0	7	3	7	8	7	0	1	6	7	7	6
Friends or relatives	74	47	52	48	39	45	56	54	52	61	51	54
Other or combinations	3	7	11	12	14	12	16	18	6	6	3	6
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	31	410	1,053	1,179	2,351	5,024	17	82	170	240	342	852

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There are rather pronounced departures in several occupational categories from the pattern of finding jobs described above (Table 4.14). Among white students, for example, the school employment service is responsible for a larger proportion of placements in professional and technical, clerical, and service jobs than in other occupational categories. White students in professional and technical work, as well as the small number who are managers or proprietors, are less likely than any other nonfarm category to have found their jobs through friends or relatives or through direct employer contacts. On the other hand, over four-fifths of nonfarm laborers, operatives, and sales workers found their jobs by these more-or-less informal means.

Nonstudents

For the total age group of employed out-of-school youth, there are relatively few differences between the methods used by whites and blacks to find their current jobs (Table 4.13). It is perhaps noteworthy that the black youth are twice as likely as white to have been placed by the public employment service, but the proportion is nonetheless small (8 percent). Blacks also are more likely than whites to have been led to their jobs by friends or relatives. Among whites, this method tends to become less important with increasing age, but among blacks it is equally prominent in each age category. For both color groups, the public employment service and newspaper advertisements become more important as age increases, but in no age-color group do both of these methods combined account for much more than a fifth of the total.

In nearly all occupational categories, direct application with employer and learning about the job through friends or relatives are the two most important single methods used by out-of-school youth to find their jobs (Table 4.15). Nevertheless, there are variations among youth in different occupations. White professional and technical workers, for instance, are much more likely than other occupational groups to have obtained their jobs through a school employment service. Black professional and technical workers appear to have made much greater use of the public employment service than other groups, although the number in this occupational category is too small for reliable estimates. Black craftsmen and operatives make relatively greater use of the public service than other occupation groups of black youth, and much greater use of it than the corresponding occupational groups of white youth.

IV MOBILITY CHARACTERISTICS

Length of Service in Current Job

Whether one examines students or nonstudents, about half of all employed males 14-24 years of age have held their jobs less than a year (Table 4.16). In both color groups, the percentage of short-service workers is greater among students than nonstudents, but in the case of the whites, when age is controlled, this pattern holds only for those in their twenties.

Table 4.14 Method Used to Find Current Job, by Major Occupation Group: Employed Males 14-24 Years of Age Enrolled in School, by Color

(Percentage distribution)

Method used to find current job	Professional and technical	Nonfarm managers, proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm laborers	Total or average
	WHITES									
School employment service	23	12	15	5	2	6	4	16	1	10
Public employment agency	3	8	4	1	0	0	1	0	0	1
Private employment agency	2	5	3	0	0	0	0	0	0	1
Directly with employer	18	7	19	27	26	26	22	26	18	22
Places or answers ads.	4	0	9	4	4	3	1	2	0	3
Friends or relatives	27	31	45	58	46	55	64	48	47	50
Other or combinations	22	37	5	5	23	10	8	7	33	13
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	466	69	463	437	210	495	690	703	396	3,974
	BLACKS									
School employment service	5	0	8	3	37	14	4	20	7	11
Public employment agency	0	0	3	24	8	5	0	1	0	3
Private employment agency	0	0	0	0	0	0	0	0	0	0
Directly with employer	4	22	23	10	11	26	38	19	22	23
Places or answers ads.	28	0	29	0	6	0	1	0	0	4
Friends or relatives	57	40	33	40	37	53	54	53	38	48
Other or combinations	6	38	3	22	0	2	2	7	32	11
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	22	4	31	27	14	41	88	112	74	418

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Table 4.15 Method Used to Find Current Job, by Major Occupation Group: Employed Males 14-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Method used to find current job	Professional and technical	Nonfarm managers, proprietors	Clerical	Sales	Craftsmen and foremen	Operatives	Nonfarm laborers	Service	Farmers and farm laborers	Total or average
	WHITES									
School employment service	14	2	6	0	4	3	3	7	0	4
Public employment agency	4	2	5	4	4	4	4	8	2	4
Private employment agency	5	2	4	3	2	1	0	1	0	2
Directly with employer	23	29	24	25	25	28	29	24	18	26
Places or answers ads.	9	7	12	14	6	4	4	16	0	7
Friends or relatives	24	36	44	45	47	51	49	33	43	45
Other or combinations	21	21	4	8	12	8	11	11	37	12
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	433	223	459	218	1,079	1,593	466	258	255	5,024
	BLACKS									
School employment service	5	0	6	0	1	0	2	2	0	2
Public employment agency	43	0	3	0	17	10	4	2	0	8
Private employment agency	0	0	3	0	0	0	0	0	0	0
Directly with employer	0	37	33	0	25	19	30	19	28	23
Places or answers ads.	0	37	9	0	3	6	5	17	0	6
Friends or relatives	52	26	32	100	52	61	51	55	58	54
Other or combinations	0	0	14	0	3	3	9	6	14	6
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	28	5	60	1	103	288	161	112	81	852

Table 4.16 Length of Service in Current Job, by Age and School Enrollment Status: Employed Males 14-24 Years of Age, by Color

(Percentage distribution)

Length of service in current job (years)	WHITES						BLACKS					
	14-15	16-17	18-19	20-21	22-24	Total 14-24	14-15	16-17	18-19	20-21	22-24	Total 14-24
	Enrolled in school						Enrolled in school					
Less than 1	51	59	61	58	49	56	67	67	71	92	66	68
1 or more	49	41	39	42	51	44	33	33	29	8	34	32
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	1,116	1,259	796	384	420	3,974	153	159	41	30	35	418
	Not enrolled in school						Not enrolled in school					
Less than 1	87	82	63	49	36	48	54	87	62	60	43	56
1 or more	13	18	37	51	64	52	46	13	38	40	57	44
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	31	410	1,053	1,179	2,351	5,024	17	82	170	240	342	852

Students A majority of employed students have held their current jobs less than a year (Table 4.16). It is rather interesting that the usual relationship between age and tenure does not prevail among students, except perhaps as between the two top age categories. Among whites, for instance, the proportion of students with at least one year of service in current job is actually lower for those 16-17 years old than for those 14-15 years old. The proportion is highest for the 22-24 year old group, but only 9 percentage points higher than for those 20-21. The evidence, in other words, suggests considerable movement among jobs and/or into and out of employment by students of all ages. Age for age, black students have shorter service than white students.

Nonstudents Among out-of-school youth--both white and black--length of service in current job is positively related to age (Table 4.16). Less than one-fifth of white youth under 18 years of age have served as long as a year, as opposed to about three-fifths of those 22 to 24 years old. In most age categories, the proportion of white youth with a year or more of service is larger than that of black youth. This inter-color difference is more significant in view of the fact that the blacks, on the average, have been out of school longer and thus have the potential for longer service than the whites.

Job Movement During 12 Months Preceding Survey: Youth 20-24 Years of Age

The substantial amount of job changing by young men is evidenced by a comparison of employment status at time of survey and one year earlier, as reported by the respondents (Table 4.17). To make the interpretation manageable, the analysis is confined to young men 20-24 years of age who are not enrolled in school and who have no more than a high school education. Because of the relationship between their age and educational attainment, it can be assumed that almost all of this group could have had continuous employment with the same employer and in the same occupational assignment.

Of the 3,200,000 young men in this category, approximately a tenth were not working a year ago either because of unemployment or absence from the labor force; over a third are now employed by a different employer, and over half are working for the same employer. The proportion who remained in the same occupation during the 12-month period was very similar to the proportion staying with the same employer, but these two categories did not consist entirely of the same individuals. Some of the young men who did not change employers did change occupation, and some of those who made an employer shift remained in the same occupational assignment. Although not shown in the table, about 10 percent of the total number of young men lived in a different county or SMSA from that in which they had resided a year earlier.

In all of these dimensions of mobility, except geographical, black men manifest a greater degree of movement than white men. For example, 55 percent of the white youth are employed by the same employer as contrasted with 45 percent of the black youth. About 55 percent of the whites, but only 46 percent of the blacks, are in the same occupational assignment.

Table 4.17 Work Status at Time of Survey Compared with One Year Earlier, by Highest Year of School Completed: Employed Males 20-24 Years of Age Not Enrolled in School Who Did Not Attend College, by Color

(Percentage distribution)

Work status one year ago compared with present	Less than 12 years	12 years	Total or average
	WHITES		
Not working	12	10	11
Working with same employer	49	60	55
In same occupation	40	46	44
In different occupation, same major group	2	4	3
In different major occupation group	7	10	8
Working with different employer	39	31	34
In same occupation	13	10	11
In different occupation, same major group	8	5	6
In different major occupation group	18	16	17
Total percent	100	100	100
Total number (thousands)	1,072	1,641	2,711
	BLACKS		
Not working	6	15	10
Working with same employer	40	50	45
In same occupation	36	39	37
In different occupation, same major group	0	1	1
In different major occupation group	4	10	7
Working with different employer	53	34	46
In same occupation	9	8	9
In different occupation, same major group	7	3	5
In different major occupation group	37	23	32
Total percent	100	100	100
Total number (thousands)	300	223	521

Only in the extent of geographical movement is there no appreciable difference between the two color groups: 11 percent of the whites and 10 percent of the blacks have experienced a change of residence across county or SMSA lines.

Those young men of both color groups who have completed high school manifest more stable employment relationships than those who have not. In the case of the whites, 60 percent of those with high school diplomas but only 49 percent of those who did not graduate from high school are serving with the same employer. The corresponding proportions in the case of black youth are 50 percent and 40 percent.

As would be expected, inter-firm and occupational mobility are not independent of each other. A change of occupation is much more likely if a young man shifts employers during the course of a year than if he serves with the same employer continuously. Among white men who changed employers, only one-third remained in the same three-digit occupational category. Among those with the same employer, exactly four-fifths served in the same occupational category. It is interesting that of those who do make an occupational change, whether with the same employer or for a different employer, the change is much more likely to be substantial (from one major occupation group to another) than slight (within a major occupation group). In both cases, a shift across major occupation group lines is almost three times as likely as a shift within the same major occupation group. These patterns hold for the blacks, also. Black youth who change employers, however, are more likely than white to change their occupation (80 percent versus 68 percent).

Relationship between First Job and Current Job: Youth 20-24 Years of Age

Another way of examining the mobility patterns of youth is to examine the relationship between the job they currently have and the first job they took upon leaving school. Of the approximately 4.1 million young men between the ages of 20 and 24 who are not currently enrolled in school and who have had some work experience, 61 percent have worked for only one employer since leaving school. This proportion is very much the same for both whites (61 percent) and blacks (63 percent). Of the almost two-fifths of each color group who are no longer with the same employer for whom they started to work when they left school, the vast majority--an identical portion of each color group (77 percent)--left their first jobs voluntarily (Table 4.18). There are systematic differences in this proportion, however, depending upon the educational attainment of the youth and upon the type of occupation in his first job. Of the white youth with less than four years of high school, 72 percent terminated their first jobs voluntarily; among those who were college graduates, 97 percent of all separations were voluntary. In the case of the blacks, the number of young men with some college is too small for reliable analysis, but the relationship that has been described for the whites holds as between those with less than a high school diploma and those who are high school graduates.

Table 4.18 Reason for Leaving First Job after School, by Highest Year of School Completed and Occupation of First Job: Males 20-24 Years of Age Not Enrolled in School and No Longer on First Job Since Leaving School, by Color

(Percentage distribution)

Reason for leaving first job after school	WHITES					BLACKS				
	Less than 12	12	13-15	16 or more	Total or average	Less than 12	12	13-15	16 or more	Total or average
White collar										
Voluntary	84	84	88	94	87	84	67	38	100	72
Involuntary	16	16	12	6	13	16	33	62	0	28
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	49	284	110	64	507	19	13	8	5	45
Blue collar										
Voluntary	73	70	84	100	73	66	78	71	0	71
Involuntary	27	30	16	0	27	34	22	29	100	29
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	552	666	122	49	1,389	117	88	7	1	213
Total (1)										
Voluntary	72	77	88	97	77	70	87	56	93	77
Involuntary	28	23	12	3	23	30	13	44	7	23
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	800	1,112	264	120	2,297	236	174	16	15	441

(1) Total includes service and farm occupations not shown separately.

White-collar workers are more likely than blue-collar workers to have terminated their first jobs voluntarily. The numbers of blacks are too small to test this relationship, but in the case of the whites, the ratio of voluntary quits to all separations from first job was 87 percent for white-collar workers and 73 percent for blue-collar workers. To some degree, of course, this relationship merely reflects the previously noted relationship between educational attainment and reason for separation from first job. Nevertheless, there is evidence in Table 4.18 that each of these independent variables exercises a separate influence. For example, among white high school graduates, voluntary separations are relatively more frequent in the case of white-collar than in the case of blue-collar workers. Within the white-collar group, those who attended college for some period were more likely to have left their first job voluntarily than those who had not gone beyond high school.

Occupational movement Young men in this age category are much more likely to have changed occupations since leaving school than to have changed employers (Table 4.19). Whereas six-tenths of the age group had served only one employer since leaving school, slightly less than one-fifth had been equally immobile with respect to occupation. About one-fifth had changed their occupational assignment within the same major occupation category, while three-fifths had changed major occupation group. On the basis of this measure, black youth are more mobile than white youth. Not only did a larger proportion of the blacks than of the whites change occupation between first and current job (87 percent versus 81 percent), but of those who did, a slightly larger proportion of the blacks than of the whites crossed major occupation groups.

Geographic movement The extent of geographic mobility between first and current ~~job~~--is, as might be expected, not nearly so great as is interfirm or occupational mobility. Nevertheless, the amount of geographic movement is by no means inconsequential. Exactly one-third of the white youth between the ages of 20 and 24 currently reside in a county of SMSA other than the one in which they took their first job after leaving school (Table 4.20). The proportion of black youth who have been geographically mobile is even larger--39 percent. In the case of the white youth, intrastate moves are considerably more prevalent than those involving longer distances. Among the blacks, on the other hand, moves between states are more common than those within a state. The migration from south to north is doubtless reflected in the fact that about one-sixth of the total number of black youth in the age category currently live in a different geographic division (Census) from that in which they took their first job. The corresponding proportion among the white youth is only about half as great.

It is interesting that there is a very pronounced relationship between geographic movement since the beginning of work career and geographic movement between school and first job. That is, young men whose first job was in a different geographic area from that in which they went to school are much more likely to have made a geographic move since having taken their

Table 4.19 Type of Occupational Mobility between First and Current Job, by Type of Occupation: Employed Males 20-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Type of occupational mobility	White collar	Blue collar	Service	Farm	Total or average
			WHITES		
Immobile	21	16	21	34	19
Mobile	79	84	79	65	81
Same 1 digit	19	22	22	11	21
Different 1 digit	60	62	57	54	61
Total percent	100	100	100	100	100
Total number (thousands)	1,092	2,101	158	148	3,530
			BLACKS		
Immobile	10	13	12	43	13
Mobile	90	87	88	57	87
Same 1 digit	6	15	33	26	19
Different 1 digit	84	72	55	31	68
Total percent	100	100	100	100	100
Total number (thousands)	78	388	72	39	582

Table 4.20 Type of Geographic Mobility between First and Current Job, by Type of Occupation of Current Job: Employed Males 20-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Type of geographic mobility	White collar	Blue collar	Service	Farm	Total or average
			WHITES		
Same county	73	64	53	78	67
Different county, same state	13	22	28	15	19
Different state, same division	8	5	8	2	6
Different division	6	7	9	5	7
Abroad	0	2	3	0	1
Total percent	100	100	100	100	100
Total number (thousands)	1,092	2,101	158	148	3,530
			BLACKS		
Same county	62	60	65	68	62
Different county, same state	3	15	10	26	14
Different state, same division	14	9	22	3	11
Different division	21	15	2	3	14
Abroad	0	0	0	0	0
Total percent	100	100	100	100	100
Total number (thousands)	78	388	72	39	582

first job than those who entered employment in the same county in which they had gone to school (Table 4.21). As has been seen, the proportion of white youth who made a geographic move between first and current job is 33 percent. But among those who last attended school in the same county as their first job, this proportion was only 21 percent. On the other hand, of those whose first job was in a different county from that in which they last attended school, fully 50 percent moved between first and current job. The same type of relationship prevails for the blacks. As would be expected, this relationship is strongest in the case of those young men who have had some college. However, it is by no means confined to them. For example, 29 percent of white youth who left school with a high school diploma currently work in a different county from that in which they began their working career. This proportion is only 21 percent in the case of those whose school and first job were located in the same county, but 52 percent in the case of those whose first job was elsewhere. The same type of relationship prevails for white high school dropouts and for black youth in both of these educational attainment categories.

Relationship between Geographic and Occupational Movement: Youth 20-24 Years of Age

When a young man makes a geographic move, he is much more likely to change occupation than when he remains in the same location (Table 4.22). Moreover, it also would appear that the probability of an occupational move is related to the distance of the geographic shift. For example, among white youth 20-24 years of age, 81 percent of those whose first and current jobs are in the same county have been occupationally mobile. This percentage rises to 83 percent for those who are currently in a different county of the same state, 85 percent for those who are in a different state within the same geographic division, and 89 percent for those who are in a different geographic division. When one takes into account the magnitude of the occupational change, the relationship is even more pronounced. Thus, 56 percent of those residing in the same county as their original job have moved to a different major occupation category, but of those currently residing in a geographic division different from that of their first job, 75 percent have shifted between major occupation groups. The same basic relationship that has been described for the whites applies also in the case of the blacks. Among them, however, those who have moved between divisions or between states within the same division are somewhat less likely to have been occupationally mobile than those who simply made an intrastate move. This is certainly contrary to what one would have expected, and may be attributable to sampling variation, because the absolute number in each of the categories of movers is rather small.

V SUMMARY

Characteristics of Current Job

This chapter has added another dimension to the differences in labor market behavior between male youth who are enrolled in school and those who are not. Not only are students less likely to be in the labor force

Table 4.21 Geographic Mobility between School and Work, by Highest Year of School Completed and Geographic Mobility between First and Current Job: Employed Males 20-24 Years of Age Not Enrolled in School, (1) by Color

(Percentage distribution)

Geographic relation between first and current job	Less than 12			12			13 or more			Total or average		
	Geographic relation between school and first job			Geographic relation between school and first job			Geographic relation between school and first job			Geographic relation between school and first job		
	Same county	Different county	Total or average	Same county	Different county	Total or average	Same county	Different county	Total or average	Same county	Different county	Total or average
	WHITES											
Same county	74	21	63	79	48	71	86	63	74	79	50	69
Different county	26	79	37	21	52	29	14	38	26	21	50	31
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	518	132	687	1,120	399	1608	390	380	807	2,028	911	3102
	BLACKS											
Same county	81	31	66	62	40	56	100	58	71	72	41	62
Different county	19	69	34	38	60	44	0	42	29	28	59	38
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	99	43	153	149	62	219	24	30	60	272	135	432

(1) Includes only those who have completed at least one year of high school.

Table 4.22 Type of Occupational Mobility between First and Current Job, by Location of First Job Relative to Current Job: Employed Males 20-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Type of occupational mobility	Same county	Different county, same state	Different state, same division	Different division	Abroad	Total or average
	WHITES					
Immobile	19	17	15	11	29	19
Mobile	81	83	85	89	71	81
Same 1 digit	25	13	10	14	49	21
Different 1 digit	56	70	75	75	23	61
Total percent	100	100	100	100	100	100
Total number (thousands)	2,305	648	208	226	36	3,530
	BLACKS					
Immobile	15	7	9	12	--	13
Mobile	85	93	91	88	--	87
Same 1 digit	18	22	11	20	--	18
Different 1 digit	67	71	80	68	--	68
Total percent	100	100	100	100	--	100
Total number (thousands)	349	78	62	77	0	582

and more likely to be unemployed than nonstudents, but, when employed, the characteristics of their jobs are quite different. Students are much more likely than nonstudents to work only part time. Probably as a result, their occupational and industrial distributions differ substantially from those of nonstudents, even when differences in age are taken into account.

Whether enrolled in school or not, a young man's color has an important influence on his occupation and the length of service in his job, but relatively little on the industry in which he is employed or the way in which he found his job. Among nonstudents, whites work longer hours per week than blacks, but the relationship does not hold for students. Among those not enrolled in school, black youth earn less than white , controlling for age, major occupation group, and educational attainment. We have not been able to make a similar comparison among students because numbers in many of the categories are too small for reliable estimates.

For students and nonstudents alike, age bears a rather pronounced relationship to occupation and to number of hours worked per week and a somewhat weaker relationship to industry. How youth find their jobs also bears a relationship to age. For nonstudents, there is a strong positive relationship with length of service in current jobs, but for students this exists only among youth in their twenties.

The hourly rate of pay of young men 20-24 years of age not enrolled in school is remarkably uniform among major occupation groups. Among white youth the average is $2.59 per hour, and the range for nonfarm occupations is only 80 cents--from $2.07 (service) to $2.87 (professional and technical). When these two extreme categories are eliminated, the remaining occupation groups fall within an 11-cent-per-hour spread. Hourly rate of pay is related positively to number of years of school completed, to the extent of occupational training outside of regular school, to good health, and to the size of the community in which the young man resides. As has been mentioned, there is also a pronounced inter-color differential in favor of the white youth. All these relationships likewise were found to exist in our previous study of males 45-59, but occupational differentials were much more pronouced for the older group.

Mobility Characteristics

Judged by the extent of job change either during the year prior to the survey or since having left school, employed young men in their early twenties display an impressive amount of mobility of all types. Since leaving school, two-fifths have worked for more than one employer. Occupational movement is even greater, for a considerable portion of it takes place within the firm. Four-fifths of the young men changed occupations between first and current jobs, and a substantial majority of these occupational moves (about three-fourths) were from one major occupation group to another. While geographic movement is not so frequent as either interfirm or occupational shifts, it is nevertheless substantial: approximately one-third of the young men between 20 and 24 years of age currently reside in a different local area from that in which they took their first job after leaving school. There are relationships among the various types of job movement. While occupational moves may occur with or without interfirm shifts, they appear to be more common among those who change their employers than among those who do not. Among young men who move geographically, occupational change is much more likely than among those who remain in the same local area, and the magnitude of the occupational change tends to be greater for long-distance than for short-distance movers.

Of the two-fifths of the young men 20-24 years of age who are no longer working for their first employers, about three-fourths left their first jobs voluntarily. This proportion is the same for both white and black youth, but varies according to educational attainment and according to occupation of first job for both color groups. A job shift is more likely to be voluntary for white-collar than for blue-collar workers. Independent of type of occupation, the proportion of separations that were voluntary increases with years of schooling. But while we know that most of such early job shifting is voluntary, we are not yet in a position to describe the circumstances under which it takes place, the processes by which it occurs, or its consequences in terms of wage improvement. These are matters at which the longitudinal analysis will be directed on the basis of information collected in the subsequent surveys.

CHAPTER FIVE*

KNOWLEDGE OF THE WORLD OF WORK

In an economic system in which individuals are free to choose among occupations and specific jobs, effective allocation of human resources depends upon workers and potential workers having accurate labor market information. The market's measure of the relative social importance of different occupations and different jobs is reflected in differentials in economic rewards. These, in turn, are presumed to attract individuals into those occupations and jobs where their contribution to the social product will be at a maximum. But this can occur only if workers have a reasonably good knowledge of the range of alternatives for which they might potentially qualify and of the rewards (and costs) attached to each. Accurate and complete labor market information also is important from the standpoint of the individual. Whatever his particular employment goals, the probabilities of achieving them are enhanced by full knowledge of the existence and characteristics of alternative employment opportunities.

What kinds of specific labor market information should individuals have? The answer depends, in part, upon the stage of the life cycle. For youth in school, for example, it is particularly important that they be aware of the full range of occupations potentially available to them, of the characteristics and rewards of different types of work, and of the entrance requirements. Only on the basis of this kind of information can rational decisions be made about the amount and type of education and training to pursue. For adults, on the other hand, while such information is not entirely irrelevant, it is rather less important, since the range of occupations open to most adults, for all practical purposes, is restricted much more narrowly as a result of educational decisions made in the past, as well as previous work experience. They are more likely than youth to consider the *type of work* as given, and to focus on the choice of *specific job*.

For adults and youth--at least if the latter choose to work--it is important to have knowledge of available employment opportunities in their local communities and elsewhere. Which firms in the area have openings in relevant occupational categories? Which firms are the best employers in terms of wage rates, fringe benefits, and other factors that influence satisfaction or dissatisfaction with work? Are opportunities greater outside the local area, either in terms of job vacancies or in terms of better wages, working conditions, or other perquisites?

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* This chapter was written by Herbert S. Parnes.

It seems reasonable to hypothesize that the degree of success a worker experiences in the labor market is associated with the extent of his labor market information. Specifically, for the group of young men under consideration in this study, we would expect the extent of labor market information, other things being equal, to be positively related to the wage rate of those who are employed and to the extent of occupational and wage improvement over time. We would anticipate an inverse relationship between amount of unemployment and the extent of labor market information, since those with more knowledge should have higher probabilities of finding work. Finally, over the years covered by this study, we should expect greater congruence between occupational aspirations and realizations among those with much knowledge than among those with little knowledge of the labor market. This is so because those with greater knowledge are likely to have more realistic aspirations and because they are more likely to be able to translate a given aspiration into reality.

The Occupational Information Test

Our measure of "knowledge of the world or work" is a very limited one, consisting of three components. The first of these involves occupational identification. Respondents were asked to select one of three statements that best describes the duties of each of ten occupations--hospital orderly, machinist, acetylene welder, stationary engineer, statistical clerk, fork lift operator, economist, medical illustrator, draftsman, and social worker. The second component involves the typical educational attainment of men in each of these same ten occupations: "How much regular schooling do you think hospital orderlies usually have?" Third, respondents were asked, for each of eight pairs of occupations, which one provides the highest average annual earnings: "Who do you think earns more in a year, a man who is an automobile mechanic or an electrician?" Standards for scoring the second and third components were derived from 1960 census data on occupation by highest year of school achieved and median earnings by occupation.[1]

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[1] The test was scored as follows: each of the occupational identification questions was assigned two points, so that scores on this component could range from 0 to 20. On the educational component, respondents were given four choices for each occupation: "less than a high school diploma, a high school diploma, some college, a college degree." For most of the occupations, responses were scored either 0, if incorrect (or if the occupational identification itself was incorrect) or 2, if correct. In several cases, either of two responses was given full credit, or one response was given full credit and another half credit. For example, in the case of stationary engineer, 2 points were awarded for either the response "high school diploma" or "less than a high school diploma." (In 1960, 45 percent of male stationary engineers had less than a high school education, but 24 percent were graduated from high school and 31 percent had gone beyond.) In the case of machinist, 2 points were given for the

It is clear that only a small portion of what has been defined as labor market information is covered by the measure that we have used. The number of occupations included is exceedingly small, although virtually all the major occupational strata are represented. Moreover, the test includes no measure of knowledge of employment opportunities in the local area.[2] The time constraints on the interview and the fact that the questions had to be applicable to a national sample of young men ranging in age from 14 to 24 and representing all socioeconomic levels imposed substantial limits on what was feasible. Nevertheless, we have been unable to find any other attempt to relate a measure of occupational information to labor market experience.[3] Our preliminary findings, described below, provide some basis for optimism that the test results will have predictive value.

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response "less than a high school diploma" and 1 point for "high school diploma." (In 1960, 61 percent of male machinists were in the former category and 32 percent in the latter.) The earnings component was scored 2 points for a correct answer, 0 points for an incorrect answer.

Two scores were computed for each respondent. One of these was based solely on the occupational identification component, with a possible range of 0 to 20. The other was a composite score based on all three components, with a possible range of 0 to 56. On the basis of each of these, respondents were classified into three categories: low (0-10 on the identification component, 0-20 on the composite); medium (11-17 on the identification component, 21-37 on the composite); high (18-20 on the identification component and 38-56 on the composite). In all of the analysis reported here, the composite scores are used.

[2] For a large portion of the young men, there is a simple measure of such information. Employed workers were asked what they would do if they lost their current jobs. Those who indicated that they would look for work were asked "Are there any particular companies in this area where you would apply?" and, if so, "Why do you mention these particular companies?" Respondents able to mention alternative employers in the area may be presumed to have better labor market knowledge than those who cannot.

[3] In a longitudinal study of adolescent boys being conducted by the Survey Research Center of the University of Michigan under the direction of Jerald G. Bachman, a job information test has been administered to the sample of high school youth. A series of 25 questions of the true-false and multiple choice type relates to the characteristics of a variety of occupations (e.g., income, status, hours of work) and the educational requirements for entry. In this study, the job information test is designed to measure the general educational development of the respondents as a means of assessing and predicting success in school. See Jerald G. Bachman, et al., Youth in Transition (Ann Arbor: Survey Research Center, 1967) Vol. 1, pp. 64-66, 69-71.

Determinants of Occupational Information Scores

Age, education, and color When young men 14-24 years of age are cross-classified by color, age, school enrollment status, and educational attainment, there is an unmistakably clear pattern that reveals a strong influence of both age and educational attainment on the extent of occupational information (Table 5.1).

The influence of age can best be observed among those not enrolled in school.[4] As an example, consider white youngsters who have left school after receiving a high school diploma. In all, just about half of these (49 percent) score high on the knowledge test; by age, the proportions are 30 percent for those 14-17 years old, 44 percent for those 18-19 years, and 53 percent for those in their twenties. A similar pattern is discernible among all of the other educational attainment categories, except those who did not even reach high school. For them, there is no relation between age and work knowledge. The predominant pattern among white youth would seem to indicate that additional years of exposure to the labor market--or perhaps just additional years of life and experience--produce greater occupational knowledge among male youth in their teens and early twenties. However, in the case of black youth, the relation between age and work knowledge is not nearly so clear. Among high school graduates, where the total number is largest, young men in their twenties are no more knowledgeable than those in their teens.

Among both blacks and whites, the relationship of educational attainment to knowledge of the labor market is dramatic. Two examples will suffice: among white men 20-24 years of age not enrolled in school, the proportion with high knowledge scores rises from 13 percent for those with less than nine years of schooling to 41 percent of those who completed one to three years of high school, 53 percent of those with high school diplomas, 75 percent of those with one to three years of college, and 87 percent of those who had four or more years of college. Among black men in the same age category, the corresponding proportions range from 6 percent to 50 percent. To some extent, it appears that education can operate as a substitute for labor market experience. For example, whites in their twenties who are not enrolled in school but have between one and three years of high school do about as well as those in their teens who are high school graduates.

As some of the preceding data suggest, the differences in labor market information between whites and blacks are dramatic. Of all those out of school, only 14 percent of the blacks, as compared with 46 percent of whites, score high in knowledge of the world of work. Part of this

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[4] Among those in school, it is virtually impossible to obtain a pure age effect from the tabular data because of the high association between age and year in school.

Table 5.1 Proportions with High and Low Scores on Occupational Information Test, by Age, School Enrollment Status, and Educational Attainment: Males 14-24 Years of Age, by Color

Age and occupational information score	Enrolled in school: current year of school						Not enrolled: highest year of school completed					
	8 or less	9-11	12	13-15	16 or more	Total or average	8 or less	9-11	12	13-15	16 or more	Total or average
	WHITES											
14-17												
Total number (thousands)	232	3,897	1,169	425	8	5,731	153	187	209	0	0	549
Percent low	67	33	13	6	0	28	58	34	17	--	--	34
Percent high	2	18	38	55	0	24	10	22	30	--	--	22
18-19												
Total number (thousands)	0	71	159	1,287	27	1,545	141	276	688	84	0	1,188
Percent low	--	40	18	2	0	6	63	24	13	6	--	21
Percent high	--	16	38	67	81	62	10	32	44	51	--	38
20-24												
Total number (thousands)	0	8	13	604	742	1,368	406	725	1,677	523	335	3,665
Percent low	--	0	9	0	0	0	54	18	8	2	2	14
Percent high	--	56	27	76	90	83	13	41	53	75	87	52
Total 14-24												
Total number (thousands)	232	3,977	1,342	2,317	776	8,644	699	1,188	2,573	607	335	5,402
Percent low	67	34	13	2	0	20	57	22	10	2	2	17
Percent high	2	18	38	67	89	40	12	36	49	72	87	46

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Table 5.1 Continued

Age and occupational information score	Enrolled in school: current year of school						Not enrolled in school: highest year completed					
	8 or less	9-11	12	13-15	16 or more	Total or average	8 or less	9-11	12	13-15	16 or more	Total or average
	BLACKS											
14-17												
Total number (thousands)	101	596	130	34	0	861	50	66	24	0	0	140
Percent low	83	63	36	12	--	60	92	69	16	--	--	68
Percent high	0	5	21	24	--	8	0	4	30	--	--	7
18-19												
Total number (thousands)	0	18	32	72	0	123	33	75	84	7	0	198
Percent low	--	82	69	19	--	41	90	73	25	18	--	54
Percent high	--	0	10	49	--	31	0	4	12	18	--	7
20-24												
Total number (thousands)	0	2	2	56	34	95	145	182	238	40	21	624
Percent low	--	45	0	18	4	13	73	52	30	10	0	44
Percent high	--	0	56	55	70	59	6	14	20	49	50	18
Total 14-24												
Total number (thousands)	102	617	165	162	34	1,078	227	323	346	46	21	963
Percent low	88	64	42	17	4	54	80	60	28	11	0	50
Percent high	0	5	19	46	70	15	4	10	19	45	50	14

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difference, of course, reflects differences in educational attainment between the two color groups. Yet even when age, school enrollment status, and educational attainment are controlled simultaneously, there is scarcely a category in which the white youth do not have a clear advantage in knowledge of the labor market. Selecting the categories in which numbers are large enough to provide reliable estimates, we note that among young men in their early twenties who left school with a high school diploma, whites are two-and-a-half times as likely as blacks to score high on the labor market knowledge test (53 percent versus 20 percent). Among boys 14-17 who are enrolled in the first three years of high school, whites are over three times as likely to score high (18 percent versus 5 percent), and only about half as likely to score low (33 percent versus 63 percent).

Cultural influences at age 14 How much a teenager knows about the world of work depends, in considerable degree, upon his socioeconomic status and upon the kind of influences that bear upon him in the home (Table 5.2). Focusing attention on boys between the ages of 14 and 17,[5] over nine-tenths of whom are enrolled in school, it is apparent to begin with that there are substantial differences between those living in rural and those living in urban areas. Of those white youth with rural residences, whether farm or nonfarm, less than one-fifth score high on our occupational information test, in contrast with over a fourth of those living in urban areas. Among all those in urban areas, size of community does not seem to make much difference with respect to the amount of knowledge the youngster has about the world of work. Those living in cities of 100,000 or over have scores substantially the same as those in towns of fewer than 25,000 population. Indeed, even those living in suburbs of large cities have no larger a proportion with high scores than those in other urban communities, although they do have a somewhat smaller proportion of individuals in the lowest score category.

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[5] Much of the analysis is based upon young men 14-17 in order to avoid the necessity of controlling for educational attainment. This young age group is homogeneous from the standpoint that over 90 percent of them are enrolled in school, and, of these, about 90 percent are in high school. In older age groups, there is much greater diversity in enrollment status and educational attainment. If explanatory variables that are correlated with educational attainment are used for the older age groups, a relationship with occupational information scores may reflect simply the strong association that has been seen to exist between educational attainment and extent of occupational information. For example, residents of rural areas are less likely than urban residents to go to college. Among youth 20 to 24 years of age, therefore, higher occupational information scores for youth who (at age 14) lived in urban areas rather than rural areas might simply reflect the greater likelihood of their having had a college education. Confining the analysis to the 14-17 year group, in cases of this kind, does not completely eliminate the problem, but reduces it very considerably.

Table 5.2 Proportions with High and Low Scores on Occupational Information Test, by Selected Socioeconomic Characteristics: Males 14-17 Years of Age, by Color

Socioeconomic characteristic	WHITES			BLACKS		
	Total number (thousands)	Percent with high scores	Percent with low scores	Total number (thousands)	Percent with high scores	Percent with low scores
Residence at age 14						
Rural farm	771	18	41	157	2	83
Rural nonfarm	670	18	36	104	4	64
Town (under 25,000)	1,868	24	26	204	5	71
City (25,000-100,000)	1,042	27	29	136	11	52
Large city (100,000 and over)	1,273	27	25	375	10	50
Suburb of large city	639	26	20	26	25	36
Total or average	6,280	24	29	1,001	8	61
Occupation of father when youth age 14(1)						
Professional and technical	672	33	16	27	21	35
Nonfarm managers and proprietors	946	34	19	16	16	49
Clerical	274	35	22	25	4	59
Sales	363	28	24	9	10	28
Craftsmen and foremen	1,371	22	29	117	9	52
Operatives	1,013	15	34	214	6	59
Nonfarm laborers	312	21	36	154	3	70
Service	258	23	34	167	14	47
Farmers and farm managers	434	19	42	76	6	55
Farm laborers	92	4	51	46	0	38
Armed forces	111	28	24	8	0	61
Total or average	6,280	24	29	1,001	8	61
Exposure to reading material at age 14						
Family had library card and regularly got newspaper(s) and magazine(s)	4,023	28	22	317	14	37
Family lacked one or more of above	2,239	16	40	680	5	72
Lacked one	1,553	19	36	267	7	57
Lacked two	529	10	46	234	5	76
Lacked three	157	8	61	179	0	89
Total or average	6,280	24	29	1,001	8	61

(1) Occupation of head of household is used if respondent not living with father at age 14.

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Among black youngsters, the influence of type of community is even more pronounced, although the pattern is somewhat different. The rural blacks display a perceptible difference depending on whether they live on farms or in nonfarm settings. Of those in urban situations, there is a difference between those in small towns (under 25,000) and those in larger communities. To consider the extremes, 2 percent of those on farms score high and 83 percent score low, while in cities of 25,000 or larger, a tenth score high and about half score low. Those in rural nonfarm settings and those in small towns lie between these two extremes.

There is a strong relationship between the amount of knowledge a white teenager has about the labor market and the socioeconomic level of his father's occupation. Approximately a third of the sons of white-collar workers score high on the test as contrasted with under a fifth of those from blue-collar families, and a seventh of those from farm families. Sons of service workers fall between those from white-collar and those from blue-collar families. Within the white-collar group, there are no substantial differences among the sons of professionals, managers, and clerical workers.

Among the blacks, although the numbers are too small for confident conclusions, it appears also to be true that sons of white-collar workers are more knowledgeable about the labor market than sons of blue-collar workers. However, sons of service workers are not very much different from those of white-collar workers. Sons of farm workers have the least amount of knowledge. Within every socioeconomic level, the knowledge of the black youth is considerably lower than that of white youth. For example, among sons of craftsmen, a fifth of the white youngsters, but only a tenth of the black, score high on the knowledge test.

The extent to which the young teenager is exposed to reading material in his home has a very strong relationship with how much he knows about the world of work. White boys between the ages of 14 and 17 whose families had books, magazines, and newspapers have substantially better knowledge about the world of work than those whose families lacked any or all of these. Over a fourth of the former score high as contrasted with less than a sixth of the latter. Of those who have all three forms of written materials in their homes, only 22 percent score low as compared with 40 percent of those who lack one or more of the three. Moreover, there is a systematic and strong relationship between the extent of cultural deprivation as measured by this variable and the extent of labor market knowledge. For example, of those who lack only one of the media, 36 percent score low; of those who lack two, 46 percent score low; of those who lack all three, 61 percent score low. The corresponding percentages with high scores are 19, 10, and 8. The pattern in the case of black youth is identical. The proportion of youngsters scoring high ranges from 14 percent among those whose families have all three media to less than half of 1 percent of those whose families have none. Correspondingly, the proportions scoring low range from 37 percent to 89 percent.

A good portion of the difference in occupational information between white and black youth is attributable to differences in this measure of their cultural background, since white youngsters are much more likely than black to have magazines, newspapers, and library cards in their homes. Almost two-thirds of the whites, but less then one-third of the blacks, have all three; 18 percent of the blacks, but only 3 percent of the whites, have none. Nevertheless, even within each category, blacks have considerably lower test scores than do whites. In families with all three media, 28 percent of the whites and 14 percent of the blacks score high. In the most culturally deprived families (by this measure), 8 percent of the whites and less than half of 1 percent of the blacks score high; 61 percent of the whites and 89 percent of the blacks score low.

Educational experience A number of facets of school experience also are related to the extent of a youngster's knowledge of the world of work (Table 5.3). It is not clear to what extent these represent independent influences, since there is doubtless a very high correlation between some of the cultural influences referred to above and the elements of school experience to be described here. Nevertheless, it is perhaps worth noting that the amount of work knowledge possessed by a youngster of high school age is related to such factors as his high school curriculum, the amount of time he spends on homework, and his favorite extracurricular pastime. White youngsters 14-17 years old who are (or have been) in the college preparatory high school curriculum have much higher scores on the occupational information test than those in the general or vocational curricula. (The youth in the commercial curriculum are too few to afford a basis for a confident estimate.) Over a third of those in the college preparatory curriculum, as compared with only a sixth in the general curriculum, score high on the test; 16 percent of those in the college preparatory curriculum score low, as compared with 34 percent of those in the general curriculum. Those in the vocational curriculum have the lowest scores of all, 14 percent scoring high and 40 percent scoring low. Blacks in the college preparatory curriculum manifest the highest knowledge of the world of work, but the other relationships that prevail for the whites do not obtain. Specifically, those in the vocational curriculum do at least as well, and perhaps slightly better, than those in the general curriculum.

Probably highly related to high school curriculum is the number of hours per week the student normally spends on homework. This variable also shows a substantial relationship to the extent of knowledge about the labor market in the case of both whites and blacks. For example, among white youngsters 14-17 years of age, high scores are obtained by 22 percent of those who spend less than five hours per week on homework and by 32 percent of those who spend ten or more hours per week.

Young teenagers who spend most of their nonschool hours reading appear to have a substantial advantage in knowledge of the world of work over those who spend their time in other ways (Table 5.3). Thirty-eight

Table 5.3 Proportions with High and Low Scores on Occupational Information Test, by Selected Aspects of High School Experience: Males 14-17 Years of Age, by Color

Aspect of high school experience	WHITES			BLACKS		
	Total number (thousands)	Percent with high scores	Percent with low scores	Total number (thousands)	Percent with high scores	Percent with low scores
Curriculum (1)						
College preparatory	2,523	36	16	188	21	31
General	2,505	16	34	509	4	62
Vocational	517	14	40	100	9	64
Commercial	146	33	20	29	11	68
Total or average	5,895	25	26	849	9	56
Hours per week spent on homework (2)						
Less than 5	1,239	22	30	131	2	62
5-9	1,956	27	24	275	12	49
10 or more	1,727	32	17	281	12	48
Total or average	4,978	27	23	692	10	52
Activity absorbing most of nonschool time (2)						
Reading	215	38	11	52	17	25
Work for pay	800	34	18	113	12	46
Nonschool sports	1,162	25	25	195	10	52
Hobby	664	25	21	52	17	47
Other	1,891	26	25	237	9	57
Total or average	4,978	27	23	692	10	52

(1) All respondents with some high school.

(2) All respondents with at least one year of high school, but less than one year of college.

percent of the white youth whose chief nonschool activity is reading, compared with 27 percent of the total group, score high on the occupational information test; only 11 percent score low, as compared with 23 percent of the total group. The youngsters whose principal nonschool activity is working for pay also have above average scores on the occupational information test. The proportion of this group scoring high is almost as great as for those who spend most of their time reading (34 percent versus 38 percent). However, the proportion scoring low is considerably greater than the proportion of those whose chief activity is reading (18 percent versus 11 percent). Blacks 14-17 years of age whose principal pastime is reading also appear to have an advantage in the occupational information test over other youngsters of the same age, although the numbers are too small to permit a confident statement on this matter.

Vocational training outside of regular school Whether a young man has participated in a vocational training program outside of regular school has a very pronounced relationship to the amount of knowledge he has about the world of work, although the association between educational attainment and training makes it impossible to know at this stage of the analysis how much of this represents an independent effect of training (Table 5.4). Among white men 14-24 years of age who have had no college, the proportion of those with no training who score high on the occupational information test is about one-third, as compared to almost half of those who have had some training. Conversely, over a fourth of those with no training score low on the test, in contrast to about 10 percent of those who have had some training. The relationship is even more dramatic in the case of black men. Only 8 percent of those with no training score high, as compared with slightly more than 25 percent of those who have had training; over half with no training score low in comparison with only 36 percent of those who have had some training.

Unlike the other factors which have been considered thus far, it is not clear what the direction of causation is between vocational training and knowledge of the world of work, assuming that a relationship independent of education does in fact exist. On the one hand, it may be argued that certain types of vocational training contribute to occupational information in the same way that general education does. On the other hand, it is equally reasonable to suppose that persons with superior labor market knowledge also are more likely to be aware of and to be interested in taking advantage of training opportunities. If the latter is the basic explanation for the relationship, it suggests that programs of occupational information will result in more widespread participation in training programs. If the former is the explanation, it suggests that training programs produce benefits in increased labor market awareness in addition to the particular skills they may impart.

Table 5.4 Proportions with High and Low Scores on Occupational Information Test, by Extent of Vocational Training outside Regular School: Males 14-24 Years of Age Not Enrolled in School with 12 or Fewer Years of Education, by Color

Extent of vocational training	WHITES			BLACKS		
	Total number (thousands)	Percent with high scores	Percent with low scores	Total number (thousands)	Percent with high scores	Percent with low scores
None	2,363	33	28	677	8	57
One type of program	1,422	44	12	162	24	39
Two or more types of programs	640	55	9	49	29	28
Total or average	4,460	40	20	896	12	52

Table 5.5 Number of Companies Named as Alternative Sources of Work, by Score on Occupational Information Test: Employed Males 20-24 Years of Age Who Would Seek Other Work if Permanently Laid Off, by Color

(Percentage distribution)

Number of companies(1)	WHITES				BLACKS			
	High scores	Medium scores	Low scores	Total or average	High scores	Medium scores	Low scores	Total or average
None	46	42	60	46	53	51	57	54
One	20	21	13	19	10	15	23	18
Two or more	35	38	26	35	37	34	21	28
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	1,310	854	335	2,499	72	192	227	492

(1) Employed respondents who said they would seek other work if they lost their current jobs were asked whether there "are any particular companies in this area where you would apply?" Categories indicate the number of companies respondents named.

The Labor Market Consequences of Occupational Information

Hypotheses about the effects of variation in labor market information, for the most part, will be tested as our longitudinal work histories unfold in the follow-up surveys of the next five years. Nevertheless, data from the initial survey provide some support for the belief that labor market information affects some aspects of a young man's achievements in the employment market.

Knowledge about relevant employers in area To begin with, it is encouraging to note a relationship between scores on the occupational information test and the ability of employed young men to name employers in the local area with whom they might seek work if they lost their present jobs (Table 5.5). Among employed white men between the ages of 20 and 24, only 39 percent of those who score low on the work test are able to name another employer as contrasted with over 55 percent of those with medium and high scores. Among the black men in the same age group, 44 percent of those with low scores are able to name an alternative employer as compared with almost 50 percent of those with medium or high scores. Thus it would appear that the various facets of labor market information are not independent of one another. Young men who have above average occupational knowledge also appear to be better informed about alternative sources of employment within the local labor market area.

Change in skill and responsibility in past year All of the young men who were employed at the time of the survey and who reported that they were working a year prior to the interview were asked to appraise the skill and responsibility required in their present job as compared with their work a year earlier (Tables5.6 and 5.7). Of the total age group of whites, 60 percent feel that their jobs involve more responsibility and 47 percent believe that their jobs demand more skill than their work required a year ago. In the case of black men, the corresponding proportions are 49 percent and 41 percent. Only about a tenth of each color group believe that there has been a decline in the responsibility and/or skill required in their work.

In virtually every age-color group there is a positive relationship between test score and likelihood of increasing skill or responsibility during the previous 12 months (Tables 5.6 and 5.7). For the total age group of whites, the proportion experiencing an increase in skill is two-fifths of those with low scores and half of those with high scores. The corresponding proportions experiencing an increase in responsibility are 54 percent and 63 percent, respectively. In the case of black men,

Table 5.6 Score on Occupational Information Test, by Age and Change in Skill Required on Job during Past Year: Males 14-24 Years of Age Employed in October 1965 and 1966, by Color
(Percentage distribution)

Age and change in skill required	WHITES				BLACKS			
	High scores	Medium scores	Low scores	Total or average	High scores	Medium scores	Low scores	Total or average
14-17								
More skill	40	39	35	38	37	38	24	29
Same skill	56	49	59	54	40	53	68	61
Less skill	4	12	6	8	23	9	8	10
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	456	757	470	1,683	18	69	137	224
18-19								
More skill	54	48	43	50	52	38	31	36
Same skill	39	38	44	39	27	54	59	54
Less skill	7	14	13	11	22	7	10	10
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	621	520	185	1,326	17	57	75	148
20-24								
More skill	51	49	43	50	50	54	40	47
Same skill	41	41	47	42	23	37	48	40
Less skill	8	9	10	9	26	9	12	13
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	2,148	1,151	410	3,710	94	202	249	545
Total 14-24								
More skill	50	46	39	47	49	48	34	41
Same skill	42	43	52	44	26	44	56	47
Less skill	8	11	8	9	25	9	10	12
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	3,225	2,428	1,065	6,719	129	327	461	917

Table 5.7 Score on Occupational Information Test, by Age and Change in Responsibility Involved in Job during Past Year: Males 14-24 Years of Age Employed in October of 1965 and 1966, by Color
(Percentage distribution)

Age and change in responsibility	WHITES				BLACKS			
	High scores	Medium scores	Low scores	Total or average	High scores	Medium scores	Low scores	Total or average
14-17								
More responsibility	55	51	52	52	64	47	34	40
Same responsibility	38	37	43	39	30	42	61	53
Less responsibility	6	12	5	9	5	11	5	7
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	456	757	470	1,683	18	69	137	224
18-19								
More responsibility	67	63	57	64	52	48	35	42
Same responsibility	24	23	35	25	48	46	56	51
Less responsibility	9	14	8	11	0	6	9	7
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	621	520	185	1,326	17	57	75	148
20-24								
More responsibility	64	60	55	62	51	59	52	54
Same responsibility	27	31	30	28	21	36	40	35
Less responsibility	10	9	15	10	28	6	8	11
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	2,148	1,151	410	3,710	94	202	249	545
Total 14-24								
More responsibility	63	58	54	60	53	54	44	49
Same responsibility	28	31	36	30	26	39	49	42
Less responsibility	9	11	10	10	21	7	7	9
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	3,225	2,428	1,065	6,719	129	327	461	917

a third of those with low scores report moving upward in terms of skill as compared with a half of those with high scores. In terms of responsibility required in their jobs, the corresponding proportions are 44 percent and 53 percent. These data indicate that men with better occupational information are more likely, at least by their own assessment, to have improved their labor market position during the past year than those whose knowledge of the labor market is less adequate. On the other hand, it is curious that those with superior occupational information are no less likely than others to have moved down in skill and responsibility; indeed, such black youth are more likely to have done so.

Hourly rate of pay The average hourly earnings of employed young men not enrolled in school bear a rather pronounced relationship to the extent of their occupational information. When we control for years of schooling or for current occupation, mean rate of pay increases as scores on the occupational information test increase for all those educational and occupational categories of both color groups with enough sample observations to permit reasonably reliable estimates.[6] For example, white youth 20-24 years of age who have not completed high school and have high occupational information scores earn almost 25 percent more per hour ($2.48 versus $2.00) than those with low scores (Table 5.8). Young white men who ended their education with a high school diploma and have high test scores earn $2.74 per hour compared with $2.50 for those with medium scores, a differential of 10 percent.

The number of black high school dropouts with high scores on the occupational information test is too small for a reliable estimate of average hourly earnings, but those with medium scores register a nine-cent per-hour (or 6 percent) differential over those with low scores. Among the black high school graduates, there is a systematic increase in mean rate of pay as test scores rise. Those with low scores earn $1.87 per hour; those with medium scores, $2.02; and those with high scores, $2.25. These represent relative differentials of 8 percent between those with low and those with medium scores, and 20 percent between those with low and those with high scores.

Blue collar is the only type of occupation in which there are sufficient numbers of nonstudents between 20 and 24 years of age in the several test score categories to permit a confident analysis of the relation between occupational information test score and rate of pay. For both whites and blacks in this occupational category, there is a strong and consistent tendency for rate of pay to increase as test scores rise (Table 5.9). Among the whites the differential between those with low and those with high scores is 44 cents per hour, or 19 percent; among blacks the corresponding differential is 66 cents, or 40 percent.

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[6] We show mean hourly rates of pay only when they are based upon at least 30 sample cases.

Table 5.8 **Mean Hourly Rate of Pay, by Highest Year of School Completed and Score on Occupational Information Test: Employed Male Wage and Salary Workers 20-24 Years of Age Not Enrolled in School, by Color**

Highest year of school completed	High	Medium	Low	Average
	WHITES			
11 or less	$ 2.48	$ 2.44	$ 2.00	$ 2.33
12	2.74	2.50	(a)	2.64
13-15	2.90	(a)	(a)	2.77
16 or more	3.06	(a)	(a)	2.98
Average	2.77	2.47	2.19	2.59
	BLACKS			
11 or less	(a)	$ 1.51	$ 1.42	$1.52
12	$ 2.25	2.02	1.87	2.02
13-15	(a)	(a)	(a)	(a)
16 or more	(a)	(a)	(a)	(a)
Average	2.29	1.95	1.55	1.84

(a) Means not shown where sample cases number fewer than 30.

Table 5.9 Mean Hourly Rate of Pay, by Score on Occupational Information Test: Employed Male Blue-Collar Wage and Salary Workers 20-24 Years of Age, Not Enrolled in School, by Color

Score on occupational information test	WHITES	BLACKS
Low	$ 2.33	$ 1.63
Medium	2.55	2.14
High	2.77	2.29
Total or average	2.62	1.91

Summary

The amount of occupational information a young man possesses grows very substantially from his early teens to his early twenties, in part as the result of formal education, but also simply as the result of experience. In addition, among youngsters 14-17 years of age who are as yet undifferentiated by substantial variation in educational attainment, the extent of occupational knowledge depends profoundly on the character of family life as revealed by such indicators as father's occupation and amount of reading material in the home. Finally, even when all these factors are controlled (to the extent that our data permit), there remain substantial color differences in occupational information: white youngsters have substantially higher scores than black in virtually every table cell we have examined.

All of these relationships might have been anticipated. Nevertheless, they are indicative of serious problems at which manpower policy needs to be directed. Low scores on the test presumably indicate some significant range of occupations that is beyond the ken of the individual. From this viewpoint, the very low scores of the youngest age category particularly are discouraging, since they suggest that largely irreversible educational decisions by high school students are being made on the basis of relative ignorance. The differences in the extent of occupational knowledge among youngsters of different socioeconomic status also are instructive, for they imply that the well-known differences in patterns of occupational choice among these groups may be caused in part by variations in how much they know about the world of work as well as by factors more difficult to remedy. All of this argues for a much greater effort to familiarize students with the dimensions of the world of work at an early age in the schools. This appears to be particularly important for youngsters from culturally deprived homes if greater equality of opportunity is to be achieved.

What the practical consequences are of differences in the extent of occupational information is a question about which we should be able to say more at the conclusion of our five years of study. Nevertheless, there are already indications that the amount of knowledge a young man has about the world of work makes a difference so far as his success in the labor market is concerned. Those with relatively greater knowledge are more likely to believe they have progressed in terms of the skill and responsibility of their jobs during the year preceding the survey. Of greater importance, even when educational attainment is controlled, those with high scores on the occupational information test enjoy higher wages than those with low scores.

These data suggest that labor market information provides a significant payoff to the individual. It is likely, of course, that our occupational information test is measuring a verbal component of general intelligence as well as the extent of labor market knowledge, and that the relationships we have found reflect the influence of intelligence. When we ultimately have a measure of general intelligence from the school records of the respondents, perhaps we shall be able to be more confident about the extent to which occupational information has an independent influence on labor market success.

CHAPTER SIX*

JOB SATISFACTION AND JOB ATTACHMENT

The attitudes of workers toward their jobs have a dual significance in a study of labor market behavior. On the one hand, such attitudes are presumably important in conditioning action. Workers make job choices in terms of the factors about jobs that are important to them. Moreover, the degree to which they are satisfied with their current jobs may influence the extent to which they are on the "lookout" for others and, consequently, the likelihood of their making a change. On the other hand, attitudes toward work are of interest in their own right for they shed some light on the nature and extent of psychological satisfaction that the existing employment pattern provides to young jobholders.

The present chapter is concerned with work attitudes from both these points of view. The first portion of the chapter is directed at an examination of the extent of youth's satisfaction with their current jobs, and the sources of both satisfaction and dissatisfaction--i.e., the aspects of their jobs that employed young men claim particularly to like and those which they dislike. The extent to which there are occupational, industrial, and demographic variations in response to these questions is explored. In the second portion of the chapter, we examine the extent of young men's attachment to their current jobs--i.e., their unwillingness to quit even in the face of ostensibly more rewarding opportunities--and relate differences in degree of attachment to differences in job satisfaction as well as to other variables. In both sections of the chapter, the analysis is limited to out-of-school employed youth between the ages of 16 and 24. The 14 and 15 year old youngsters have been omitted from the analysis because compulsory school attendance and child labor laws restrict their full participation in the labor market. The number of young men not in school in this age group is only 48,000, too small for reliable statistical analysis.

I JOB SATISFACTION

Variation in Degree of Satisfaction

The degree of satisfaction workers feel toward their current jobs has been measured by a single question asked of employed out-of-school youth: "How do you feel about the job you have now? Do you like it very much, like it fairly well, dislike it somewhat, or dislike it very much?" The overwhelming majority of employed young men react favorably to their jobs: 90 percent of the whites and 85 percent of the blacks report that they like their jobs either very much or fairly well (Table 6.1). There is a rather substantial difference between the two color groups, however, in the proportion expressing the highest degree of job satisfaction. While more than half of the white youth claim to like their jobs very much, the same is true for only slightly more than a third of black young men.

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* This chapter was written by Ruth S. Spitz and Herbert S. Parnes with the collaboration of Andrew I. Kohen.

Table 6.1 Satisfaction with Current Job: Employed Males 16-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Degree of satisfaction	WHITES	BLACKS
Like it very much	51	35
Like it fairly well	39	50
Dislike it somewhat	7	10
Dislike it very much	2	4
Total percent	100	100
Total number (thousands)	4,993	835

Type of occupation and educational attainment The extent to which young men register high satisfaction with their jobs depends upon the type of occupation in which they are employed and, also, on the relationship between their occupation and the amount of education they have had (Table 6.2). Both white and black youth engaged in white-collar jobs are more likely to express high satisfaction than those in blue-collar occupations. (There are too few youth in the other occupational categories for confident comparisons.) The difference is 8 percentage points in the case of white youth (57 versus 49 percent) and 14 percentage points in the case of the black (48 versus 34 percent). Thus, the inter-color difference in high job satisfaction is more pronounced for blue-collar than for white-collar workers.

Type of occupation and educational attainment interact in an interesting manner to affect job satisfaction. For the total group of white youth, there is no difference in degree of job satisfaction between those who are high school dropouts and those who ended their educations with a high school diploma. Young men with some college include a slightly higher proportion of very satisfied workers than either of these two groups (56 percent versus 51 percent). However, within the white-collar group, degree of satisfaction is positively related to educational attainment, while within

Table 6.2 Proportion Highly Satisfied with Job, by Type of Occupation and Highest Year of School Completed: Employed Males 16-24 Years of Age Not Enrolled in School, by Color

Type of occupation and highest year of school completed	WHITES		BLACKS	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
White collar	1,333	57	94	48
Less than 12	162	51	28	64
12	642	55	31	29
13 or more	529	61	35	54
Blue collar	3,115	49	547	34
Less than 12	1,288	51	296	36
12	1,544	48	224	29
13 or more	283	43	27	41
Total(1)	4,993	51	835	35
Less than 12	1,656	51	448	35
12	2,442	51	319	32
13 or more	894	56	67	48

(1) Total includes service and farm workers not shown separately.

the blue-collar group the relationship is inverse. Thus, it appears that degree of satisfaction is related to the appropriateness of one's education to his occupational assignment. The numbers of black youth are too small in most occupation-education categories to permit a comparable analysis. Nevertheless, it is noteworthy that black youth with less than a high school diploma who are employed in blue-collar jobs register more satisfaction than high school graduates in the same occupational group.

Although not shown here, tabulations of degree of satisfaction cross-classified by age and type of occupation provide no clear evidence of a relationship between age and job satisfaction. Most of the occupation categories contain too few observations for confident conclusions. However, in the case of blue-collar workers, young men in their twenties differ only very slightly from those in their teens in amount of job satisfaction. Of the younger age group, 46 percent are highly satisfied compared with 48 percent of the older group. In the case of black youth, the corresponding proportions are 32 and 34 percent.

Industry There is variation among industries in the degree of job satisfaction young workers express; but the pattern is not the same for blacks and whites, doubtless reflecting differences in the types of jobs available to the two color groups within industries (Table 6.3). For whites, the degree of satisfaction is perceptibly lower in manufacturing and in trade than it is in other industry divisions in which the numbers of observations are large enough for reliable estimates. In the case of blacks, on the other hand, agriculture and construction have smaller proportions of highly satisfied workers than most other industries, while manufacturing stands just about at the average for all industries and trade is actually somewhat higher.

Factors in Job Satisfaction and Dissatisfaction

Factors liked best in current job Another way of approaching the question of job satisfaction is to inquire about workers' reactions to the various aspects of their jobs. Job factors or qualities may be categorized as "intrinsic" if they are inseparable from the nature of the work itself and "extrinsic" if they stem from the job environment. A search of the literature reveals many studies designed to test the controversial Herzberg thesis that intrinsic factors are primarily "motivators" which, when present, are sources of job satisfaction, but when absent do not cause dissatisfaction, and that extrinsic factors are "hygienes" which cause dissatisfaction when absent, but do not generate satisfaction when present.[1]

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[1] See, among others: Frederick Herzberg, Bernard Mausner, and Barbara Snyderman, The Motivation to Work (New York: John Wiley and Sons, Inc., 1959); Frederick Herzberg, Work and the Nature of Man (Cleveland: World Publishing Co., 1966); Orlando Behling, George Labovitz, and Richard Kosmo, "The Herzberg Controversy: A Critical Reappraisal," Academy of Management Journal, Vol. 11 (March, 1968), pp. 99-108; Robert House and Lawrence Wigdor, "Herzberg's Dual-Factor Theory of Job Satisfaction and Motivation: A Review of the Evidence and a Criticism," Personnel Psychology, Vol. 20 (Winter, 1967), pp. 369-89; and Carl A. Lindsay, E. Marks, and L. Gorlow, "The Herzberg Theory: A Critique and Reformulation," Journal of Applied Psychology, Vol. 51 (August, 1967), pp. 330-39.

Table 6.3 Proportion Highly Satisfied with Job, by Major Industry Division: Employed Males 16-24 Years of Age, Not Enrolled in School, by Color

Major industry division	WHITES		BLACKS	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
Agriculture, forestry, and fisheries	280	52	99	21
Mining	43	49	0	--
Construction	501	59	85	28
Manufacturing	2,004	48	302	36
Transportation and public utilities	312	60	41	17
Wholesale and retail trade	938	46	163	40
Finance	91	52	8	38
Services	635	58	87	42
Public administration	187	58	47	51
Total or average	4,993	51	835	35

We asked all employed youth: "What are the things you like best about your job?" The first-mentioned responses were coded and categorized as "intrinsic" or "extrinsic" factors. Among the intrinsic factors are responses indicating a general liking for the type of work, a feeling that the job is important, that it involves a pleasant variety of activity, and that it permits a degree of autonomy and responsibility. Among the factors classified as extrinsic are wages, hours, physical working conditions, the quality of management, and the character of interpersonal relations. All but 1 percent of employed white youth are willing to name a quality about their jobs they like best; four out of seven cite an intrinsic job factor, while the remainder mention an extrinsic characteristic (Table 6.4). Intrinsic qualities are most often cited by farm workers (85 percent), professional and technical workers (77 percent), and craftsmen (62 percent). On the other hand, extrinsic factors are selected most frequently by salesmen (61 percent) and by the men in clerical and service occupations (52 and 53 percent, respectively).

Overall, there is not much difference between the factors white and black youth like best about their jobs, although the black are somewhat more likely to be unable to single out any factor (6 percent versus 1 percent). Of the blacks, 54 percent cite an intrinsic factor (compared with 57 percent of the whites) and 40 percent mention an extrinsic factor (compared with 42 percent of the whites). However, there are fairly pronounced differences when occupation is controlled. In the case of white-collar workers, the black youth are more likely than their white counterparts to cite intrinsic factors (64 percent versus 58 percent) and this color difference is even greater among clerical workers. Among manual workers, black youth are somewhat less likely to be intrinsically oriented (53 percent versus 56 percent); this difference is more pronounced among craftsmen and is greater still for farm workers.

Job factors disliked In addition to inquiring about the features of their jobs that they especially liked, all employed respondents who were not enrolled in school also were asked: "What are the things about your job that you don't like so well?" Their responses were classified as intrinsic or extrinsic on exactly the same basis as their answers to the question about the job factors they liked best. Irrespective of color, nearly half of all employed youth dislike most some extrinsic quality of their job, and another three-tenths complain of an intrinsic job factor, but close to a fourth do not regard any job characteristic as distasteful (Table 6.5). There is almost no difference between whites and blacks in these respects. In contrast, our study of mature men found perceptible inter-color differences: blacks were less likely than whites to dislike an intrinsic factor by 11 percentage points.[2]

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[2] Herbert S. Parnes, et al., The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of the Cohort of Men 45-59 Years of Age, Vol. I (Columbus: The Ohio State University Center for Human Resource Research, 1968), p. 227

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Table 6.4 Type of Factor Liked Best about Job, by Major Occupation Group: Employed Males 16-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Factor liked best	WHITES											
	White collar					Blue collar				Service	Farm	Total or average
	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Total	Craftsmen and foremen	Operatives	Nonfarm laborers	Total			
Intrinsic	77	58	48	39	58	62	52	55	56	47	85	57
Extrinsic	23	40	52	61	42	37	46	43	42	53	15	42
Wages and fringes	4	11	8	8	7	10	19	18	16	11	6	13
Hours	5	0	10	10	7	5	8	6	7	4	0	6
Physical working conditions	1	7	5	7	4	4	2	1	2	2	0	3
Management and personal relations	11	16	24	37	21	14	13	14	13	28	5	16
Other extrinsic	2	6	4	0	3	4	4	3	4	9	3	4
Nothing	0	2	0	0	0	1	2	2	2	0	0	1
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	433	223	459	218	1,333	1,079	1,584	451	3,115	258	248	4,993

	BLACKS									
	White collar			Blue collar				Service	Farm	Total or average
	Clerical	Other	Total	Craftsmen and foremen	Operatives	Nonfarm laborers	Total			
Intrinsic	59	76	64	52	55	49	53	55	54	54
Extrinsic	41	24	36	41	40	46	42	38	33	40
Wages and fringes	2	3	3	15	12	25	16	7	1	12
Hours	18	0	12	1	6	6	5	5	4	6
Physical working conditions	3	0	2	8	3	1	3	0	0	3
Management and personal relations	8	21	13	16	15	14	15	26	10	15
Other extrinsic	10	0	6	2	5	0	3	0	17	4
Nothing	0	0	0	7	5	4	5	7	13	6
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	60	34	94	103	286	158	547	106	75	835

Table 6.5 Type of Factor Liked Least about Job, by Major Occupation Group: Employed Males 16-24 Years of Age Not Enrolled in School, by Color

(Percentage distribution)

Factor liked least	WHITES											
	White collar					Blue collar				Service	Farm	Total or average
	Professional and technical	Nonfarm managers and proprietors	Clerical	Sales	Total	Craftsmen and foremen	Operatives	Nonfarm laborers	Total			
Intrinsic	33	40	31	22	32	31	32	25	31	22	30	30
Extrinsic	52	41	53	44	49	44	47	51	46	52	44	47
Wages and fringes	18	10	26	12	18	7	10	10	9	16	11	12
Hours	8	19	10	17	12	13	14	9	13	20	25	13
Physical working conditions	1	2	2	0	1	3	6	8	5	0	2	4
Management and personal relations	7	3	8	5	6	4	5	10	7	8	2	6
Other	18	7	7	9	12	17	11	14	12	8	3	11
Nothing	15	18	16	35	19	26	21	24	23	26	27	22
Total percent	100	100	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	433	223	459	218	1,333	1,079	1,584	451	3,115	258	248	4,993

Factor liked least	BLACKS									
	White collar			Blue collar				Service	Farm	Total or average
	Clerical	Other	Total	Craftsmen and foremen	Operatives	Nonfarm laborers	Total			
Intrinsic	19	24	20	27	26	36	29	16	32	27
Extrinsic	64	44	56	49	47	35	44	62	34	47
Wages and fringes	27	0	17	26	21	13	20	32	14	20
Hours	12	9	11	5	7	6	6	13	17	8
Physical working conditions	11	0	7	2	6	0	3	3	1	3
Management and personal relations	5	6	6	2	7	5	5	7	0	5
Other	8	29	16	14	7	11	9	8	3	10
Nothing	18	32	24	24	26	30	26	21	34	26
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	60	34	94	103	286	158	547	106	75	835

Among white youth, wages and fringe benefits and hours of work are the extrinsic job factors most frequently mentioned as undesirable. Overall, each of these accounts for an eighth of all responses, but there are substantial differences among occupational categories. For example, wages are a source of dissatisfaction to as many as a fourth of clerical workers and a sixth each of professional and technical and service workers. On the other hand, hours of work are the most objectionable feature in the case of a fourth of all farm workers, and close to a fifth of nonfarm managers, service workers, and salesmen.

Black youth are more likely than white to object to their wages and less likely to focus on hours of work as the principal source of job dissatisfaction. In all occupational categories in which numbers are large enough for reliable estimates (except farming), the percentage of black youth who mention wages or fringe benefits as the most unsatisfactory aspect is larger than the proportion mentioning hours of work.

Sources of satisfaction and dissatisfaction and degree of satisfaction There is a very substantial relationship between the type of job factors a young man particularly likes and dislikes and the degree of job satisfaction he professes. For example, those who cite an intrinsic factor as the most satisfying aspect of the job are far more likely to register high satisfaction than those who mention an extrinsic factor (Table 6.6). This relationship prevails among white youth in white-collar jobs and among blue-collar workers of both color groups. (The number of black youth in white-collar work who favor extrinsic job qualities is too small to analyze.) As an illustration, among white youth employed in blue-collar occupations, 55 percent of the "intrinsics," as contrasted with only 41 percent of the "extrinsics," like their jobs very much. Our evidence does not support the obverse of this relationship, *viz*., that dislike for extrinsic factors produces more job *dissatisfaction* than dislike for intrinsic factors. Indeed, in view of the important role that intrinsic job qualities play in job satisfaction, it is not reasonable to expect that distasteful intrinsic work qualities necessarily should be unimportant in producing job dissatisfaction. Table 6.7 shows that, among whites, dislike of extrinsic factors is slightly more likely than dislike of intrinsic factors to be associated with job dissatisfaction, but the relationship is precisely the opposite in the case of the blacks.

Although we are mindful of the substantial differences between the kind of attitudinal questions on which Herzberg's findings rest[3] and

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[3] Cf. Herzberg, *et al*., *The Motivation to Work*, pp. 20, 141. Herzberg asked each respondent to think of a time when he felt "exceptionally good" or "exceptionally bad" about his job and then to identify critical incidents that had produced that feeling. Our questionnaire, on the other hand, provided only four specific replies to the job satisfaction query: "How do you feel about the job you have now? Do you like it very much, like it fairly well, dislike it somewhat, or dislike it very much?;" and our next questions were simply "What are the things you like best about your job?" and "What are the things about your job that you don't like so well?"

Table 6.6 **Proportion Highly Satisfied with Job, by Type of Occupation and Type of Factor Liked Best about Job: Employed Males 16-24 Years of Age Not Enrolled in School, by Color**

Type of occupation and type of factor liked best	WHITES		BLACKS	
	Total number (thousands)	Percent who like their job very much	Total number (thousands)	Percent who like their job very much
White collar				
Intrinsic	766	65	60	45
Extrinsic	557	46	34	54
Blue collar				
Intrinsic	1,711	55	281	40
Extrinsic	1,296	41	223	29
Total (1)				
Intrinsic	2,742	57	442	42
Extrinsic	2,035	44	328	29

(1) Total includes service and farm workers not shown separately.

Table 6.7 **Proportion Who Dislike Job, by Type of Occupation and Type of Factor Liked Least about Job: Employed Males 16-24 Years of Age Not Enrolled in School, by Color**

(Percentage distribution)

Type of occupation and type of factor liked least	WHITES		BLACKS	
	Total number (thousands)	Percent who dislike job	Total number (thousands)	Percent who dislike job
White collar	1,333	8	94	4
Intrinsic	334	6	19	0
Extrinsic	638	13	53	8
Blue collar	3,115	10	547	15
Intrinsic	866	12	144	38
Extrinsic	1,388	14	232	12
Total (1)	4,993	9	835	14
Intrinsic	1,304	11	217	34
Extrinsic	2,268	13	380	10

(1) Total includes service and farm workers not shown separately.

those of our survey, it nevertheless seems worth pointing out that our findings appear to be consistent with Herzberg's thesis that intrinsic factors are generally the source of job satisfaction. While extrinsic characteristics of jobs, if unsatisfactory, can produce dissatisfaction, they are generally insufficient, even if attractive, to create feelings of satisfaction with the job.

II JOB ATTACHMENT

The early phase of men's work careers has frequently been described as a stage of exploration and experimentation in the labor market, characterized by considerable movement among employers, occupations, industries, and labor market areas. For one thing, merely because of their age, men in their late teens and early twenties cannot have accumulated lengthy service in a job; most of them, therefore, have not yet developed the strong economic and psychological ties that are characteristic of older workers. Furthermore, the premium placed on youth by many employers means that opportunities for job shifts are generally greater for young workers than for older ones.

Although younger workers are known to be more mobile than older workers in virtually all respects, there is, nevertheless, considerable variation among them in the extent to which they move among jobs. One of the principal purposes of our longitudinal study is to examine both the causes and consequences of this variation. We wish to know, for example, what characteristics of young men are associated with the tendency to make job shifts of various kinds or to remain with the same employer, in the same occupation, and in the same locality. We also intend to examine the various patterns of change and stability, and to inquire whether any of them are more likely than others to be associated with successful accommodation to the labor market, as measured by improvement in occupation, income, avoidance of unemployment, attitude toward job, and similar factors.

As a foundation for this longitudinal analysis of mobility, the present section explores the mobility propensities of young men between the ages of 16 and 24 who have left school and also are employed. Our aim here is to ascertain the correlates of a high degree of attachment to current employer. In the follow-up studies, we shall be interested in checking the predictive value of our job attachment measure and in exploring the ways in which propensities to move interact with characteristics of the labor market environment to produce actual job movement.

The Concept and Measure of Job Attachment

The concept of job attachment that is being used here, and the conceptual framework for analyzing it, have been described at length in a previous report.[4] Briefly, we mean by job attachment the converse of the economist's definition of interfirm mobility, that is, the propensity of an employed individual to remain with his present employer despite his perception of ostensibly more rewarding opportunities elsewhere. Our measure of this propensity is based upon the response to a hypothetical job offer: "Suppose someone in this area offered you a job in the same line of work you're in now. What would the wage or salary have to be for you to be willing to take it?" An identical question was asked relating to a hypothetical job somewhere outside the local area. In both cases the question was open-ended, and responses were coded in relation to current wage rate. Thus, the young men are classified in terms of the percentage increase in wage rates which they report would be necessary in order to induce them to make (1) an interfirm shift in the same labor market area, and (2) a geographic shift to some other area of the country.

We conceive an individual's attachment to his present job to be a function of the interaction between his own characteristics, those of the job, and the characteristics of the labor market. For example, the structure of economic and noneconomic rewards in a job relative to the individual's value hierarchy will influence the way he reacts to another job paying higher wages. But the evaluation made by the employee is substantially affected by the character of the labor market. Since he has no assurance that the particular job to which he is reacting will be permanent, his willingness to give up the one he has is bound to be influenced by his estimate of the availability of other opportunities.

The individual's propensity to move is not, of course, the same thing as the objective probability of his leaving his current employer. The former is a purely attitudinal variable; the latter is a function not only of the worker's attitudes, but of the actual opportunities for movement. These, in turn, depend upon: (1) the volume and character of job openings, (2) employers' hiring preferences, and (3) the personal characteristics of the worker that determine (a) the extent of his knowledge of alternative opportunities, (b) his initiative and vigor in seeking them out, and (c) his attractiveness to other employers. In other words, no matter how high a worker's propensity to move (i.e., no matter how low his attachment), the probability of his actual movement is not necessarily great unless there are other jobs that he knows about and unless he is acceptable to other employers.

Correlates of Job Attachment

At one extreme, about three-tenths of employed young men 16-24 years old who are not enrolled in school are willing to change employers within the local area for a wage differential of less than 10 percent above what they are currently earning (Table 6.8). At the other extreme, about one in seven said he would not change jobs for *any* wage rate. As would be expected, there is greater reluctance to consider a geographic move.

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[4] Parnes, *et al.*, *op.cit.*, pp. 147-153.

Table 6.8 Attachment to Current Job as Measured by Reaction to Hypothetical Job Offer Inside Local Area, by Age: Employed Male Wage and Salary Workers 16-24 Years of Age, Not Enrolled in School, by Color

(Percentage distribution)

Reaction to hypothetical job offer inside local area	WHITES					BLACKS				
	16-17	18-19	20-21	22-24	Total 16-24	16-17	18-19	20-21	22-24	Total 16-24
Would accept at same or lower wage	19	22	30	21	23	16	23	19	17	19
Would accept for wage increase of less than 10 percent	16	10	4	9	9	9	7	4	8	7
Would accept for wage increase of 10-50 percent	32	41	41	45	42	50	48	43	56	50
Would accept for wage increase of more than 50 percent	13	10	8	7	9	22	14	20	11	15
Would not accept at any conceivable wage	20	18	17	17	17	4	9	13	8	10
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	394	1,013	1,120	2,219	4,746	78	164	239	340	821

Table 6.9 Attachment to Current Job as Measured by Reaction to Hypothetical Job Offer Outside Local Area, by Age: Employed Male Wage and Salary Workers 16-24 Years of Age, Not Enrolled in School, by Color

(Percentage distribution)

Reaction to hypothetical job offer outside local area	WHITES					BLACKS				
	16-17	18-19	20-21	22-24	Total 16-24	16-17	18-19	20-21	22-24	Total 16-24
Would accept at same or lower wage	8	10	14	11	11	8	11	4	10	8
Would accept for wage increase of less than 10 percent	6	4	3	3	4	0	4	3	2	3
Would accept for wage increase of 10-50 percent	15	30	24	31	28	32	25	22	26	25
Would accept for wage increase of more than 50 percent	27	25	20	22	23	36	37	37	36	37
Would not accept at any conceivable wage	43	32	39	33	35	24	24	34	25	27
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	394	1,013	1,120	2,219	4,746	78	164	239	340	821

Only about a seventh of the young men indicate a willingness to take a job outside the local area for anything less than a 10 percent increase over their current wage rate. As many as a third report that no increase would induce them to move (Table 6.9).

We do not propose to interpret any of these responses literally. It is not necessary to debate, for example, whether the young men who say they would not make a geographic shift for any conceivable wage increase *really* mean that, or whether their responses simply reveal limited imaginations. Our only purpose is to categorize individuals according to their relative degree of attachment to their present employers or, what amounts to the same thing, according to their propensity to move. We, therefore, assume only that individuals who say that they would move for a small (or no) wage increase are less highly attached to their current jobs than those who would require a larger increase. The highest degree of attachment is attributed to those who say they would not take another job at any wage. In most of the analysis that follows, we measure the relative attachment of any given group of workers by the proportion of these very highly attached individuals it contains.

Age and color Comparison of the data in Tables 6.8 and 6.9 with comparable data for employed men 45-59 years of age supports the generalization that young men are considerably more mobile than older men. About two-fifths of the latter, as compared with only one-seventh of the group under consideration here, are highly attached to their employers based on a hypothetical job offer in the local labor market. If a geographic move is involved, the corresponding proportions are almost three-fifths for the older men compared with a third of the youth.[5] This relationship between job attachment and age, however, does not appear to obtain *within* the age category of youth. Those in their teens do not differ systematically in this respect from those in their twenties. As is true in the case of the older male group, whites are more highly attached to their current jobs than blacks. The proportion of highly attached employees is one-sixth in the case of young whites and one-tenth in the case of the young blacks.

Occupation Among whites, the most pronounced occupational variation in job attachment is the relatively low attachment of professional and technical workers and the relatively high attachment of managers. Compared with an overall average of 17 percent, professional and technical workers have only 8 percent of highly attached workers, and managers and proprietors have as many as 29 percent (Table 6.10). Among blacks, on the other hand, professional and technical workers appear to have a much higher-than-average degree of attachment to current job, although the number of persons in the professional and technical category is too small for a confident conclusion on this matter. If the relationship is real rather than a result of sampling variation, it is consistent

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[5] *Ibid.*, p. 154.

Table 6.10 **Proportion Highly Attached to Current Job, by Major Occupation Group: Employed Male Wage and Salary Workers 16-24 Years of Age, Not Enrolled in School, by Color**

Major occupation group	WHITES		BLACKS	
	Total number (thousands)	Percent highly attached	Total number (thousands)	Percent highly attached
Professional and technical	423	8	28	26
Nonfarm managers and proprietors	181	29	5	26
Clerical	456	15	60	6
Sales	205	23	1	0
Craftsmen and foremen	1,050	21	101	13
Operatives	1,560	17	286	6
Nonfarm laborers	442	13	158	12
Service	249	18	106	12
Farm	138	21	62	6
Total or average	4,746	17	821	10

Table 6.11 Proportion Highly Attached to Current Job, by Type of Occupation and Length of Service: Employed Male Wage and Salary Workers 16-24 Years of Age Not Enrolled in School, by Color

Type of occupation and length of service (years)	WHITES		BLACKS	
	Total number (thousands)	Percent highly attached	Total number (thousands)	Percent highly attached
White collar				
Less than 1	554	14	62	11
1-2	505	16	23	22
3 or more	207	19	8	0
Blue collar				
Less than 1	1,659	17	313	8
1-2	901	18	148	12
3 or more	493	19	83	3
Service				
Less than 1	160	13	55	16
1-2	56	25	32	13
3 or more	33	27	19	0
Farm				
Less than 1	72	14	36	4
1-2	30	32	12	0
3 or more	31	39	12	17
Total or average				
Less than 1	2,462	16	476	10
1-2	1,507	18	218	13
3 or more	770	19	123	4

with a hypothesis advanced in our study of older men--viz., that when black men have achieved a relatively advantageous position, they are more reluctant than their white counterparts to make a change, presumably because they have more to lose if the change does not work out satisfactorily.

The lower attachment of black youth, as compared with white youth, is not explained by the difference in their distributions among the major occupation groups. With the exception of the professional and technical category, in which the relationship is reversed, black men show a lower proportion of highly attached workers than white men in every category. In the case of operatives, where the numbers of both color groups are largest, the proportions are 17 percent for the whites and 6 percent for the blacks--a difference even greater than the average difference between the two groups.

Length of service For the labor force as a whole, there is considerable evidence that the probability of a voluntary job change declines substantially as length of service increases. This is so, in part, because economic equities in jobs increase with increasing length of service (e.g., lower susceptibility to lay off and more liberal vacations). Moreover, social and psychological bonds are likely to become stronger with the passage of time. Among the group of workers under consideration here, however, the oldest of whom is only 24 years of age, there can be only limited variation in job tenure; it is, therefore, not surprising that there is no pronounced relationship between attachment and length of service (Table 6.11). Among whites, the proportion of highly attached men, indeed, does increase slightly as tenure increases; while the differences are not statistically significant, their regularity gives some support to the belief that they may be real. However, among blacks, the relationship between tenure and attachment is not at all regular. Blue-collar workers--the only group large enough for confident generalization--with one or two years of service evidence greater attachment than those with less than one year; but, those blacks with three or more years of service have the lowest degree of attachment. These relationships may reflect a slower advancement of blacks relative to whites during the several years after hire, but this interpretation is purely speculative at this juncture.[6]

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[6] In this context, it is worthwhile noting that the differential in job satisfaction between whites and blacks also widens among those in the longest tenure category. In the short-tenure group, black workers are nearly four-fifths as likely as their white counterparts to be highly satisfied; among workers with long tenure, on the other hand, blacks are only two-thirds as likely as whites to be highly satisfied.

Work attitudes The level of satisfaction that a man expresses in his job is not necessarily the same thing as the degree to which he is attached to it, in the sense in which that term is being used here. The characteristics of the worker, the work situation, and the labor market can combine to produce a level of attachment different from the level of satisfaction. For example, a security-conscious worker may be reluctant to quit a job in which he has long seniority despite dissatisfaction with it on other grounds, while an equally dissatisfied worker who is more inclined to take risks may have less reservation about leaving. Nevertheless, one would expect to find a fairly strong relationship between these two attitudinal measures, and such a relationship was, in fact, found among the older men.

Young men, also, as Table 6.12 indicates, who like their jobs very much are considerably more likely to be highly attached than those who express lesser degrees of enthusiasm. For the total group of whites, the former are about twice as likely as the latter to reveal high attachment (22 percent versus 11 percent). In the case of the blacks the difference is not so great (12 percent versus 8 percent). In the case of white men, the positive relationship between satisfaction and attachment exists among both white-collar and blue-collar workers; among black, it prevails only for the white-collar employees.

There appears to be a relationship between the extent of a young man's attachment to his current job and the relative importance he attaches to wages versus the congeniality of the work in deciding what kind of occupation he wants (Table 6.12). Both black and white men, irrespective of whether they are serving in white- or blue-collar occupations, who regard wages as more important include a lower percentage of highly attached workers than those who stress the importance of liking the type of work they are doing. The difference is most pronounced in the case of black men who are serving in blue-collar jobs, where 5 percent of the extrinsically oriented persons ("good wages") and 12 percent of the intrinsically oriented ("liking the work") register high attachment. Among white men, the difference is 8 percentage points in the case of white-collar workers (10 percent versus 18 percent) and 5 percentage points in the case of those in blue-collar occupations (14 percent versus 19 percent). These results are what one intuitively might have expected, since it is reasonable to suppose that a person's willingness to contemplate a job change for more money will be related to the relative importance of monetary rewards in his value hierarchy. Nevertheless, it should be noted that this relationship was not found to exist in the case of the older males.[7] Whether the difference between the two sets

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[7] There is another difference between the findings on attitudinal relationships in the two studies. In the case of the older males, we found that those who liked their current jobs for exclusively intrinsic reasons (i.e., factors relating to the nature of the work) were more highly attached to their current employers than those who mentioned exclusively extrinsic factors in job satisfaction (i.e., job attributes such as pay, hours of work, physical working conditions, and other factors associated with the particular employer for whom they worked rather than with the type of work they did). ibid., p. 161. There is no such systematic relationship evident in the present study.

Table 6.12 Proportion Highly Attached to Current Job, by Type of Occupation and Selected Work Attitudes: Employed Male Wage and Salary Workers 16-24 Years of Age, Not Enrolled in School, by Color

Type of occupation and selected work attitude	WHITES		BLACKS	
	Total number (thousands)	Percent highly attached	Total number (thousands)	Percent highly attached
Satisfaction with job:				
White collar				
Like it very much	710	19	45	20
Other	552	11	48	4
Blue collar				
Like it very much	1,457	23	181	8
Other	1,562	13	356	9
Total (1)				
Like it very much	2,379	22	287	12
Other	2,318	11	522	8
Work motivation				
White collar				
Good wages	229	10	30	5
Liking the work	987	18	52	20
Blue collar				
Good wages	583	14	270	5
Liking the work	2,380	19	252	12
Total (1)				
Good wages	886	14	384	7
Liking the work	3,693	19	393	12

(1) Total includes service and farm workers, who are not shown separately.

of results stems from a difference in the wording of the question in the two studies or from other factors cannot be said, at least at the present.[8]

Potential geographic mobility There are interesting relationships between responses to the hypothetical job offers inside and outside the local labor market area (Table 6.13). As would be expected, there is a pronounced relationship between the two measures of attachment to current job. For example, of those who are highly attached to current job as measured by reaction to alternatives inside the local labor market, fully three-quarters would not consider a job outside the area at any conceivable pay. In contrast, of those who would be willing for some wage increase to change jobs within the area, slightly over a fourth would refuse to move out at any price. This pattern prevails for both whites and blacks.

What is more interesting than this relationship, however, are the exceptions to it. Of the three-quarters of a million white youth who are so firmly wedded to their current employers that they indicate an unwillingness to move to another job within the area at any conceivable wage, a fourth are apparently willing to change employers if such a shift involves leaving the area. A similar proportion obtains in the case of the blacks. It is believed generally that the barriers to geographic movement are more pronounced than those that inhibit other types of job shifts. This is doubtless true when judged by the frequency of various types of job moves made by the labor force as a whole. Nevertheless, the present evidence indicates that a far from negligible number of young workers are more willing to change employers if at the same time they can escape the community than they are to move within the same area.

Other characteristics We had hypothesized that the attachment of a young man to his current job would be influenced by the state of his health; specifically, that employed men with health limitations would manifest an above-average reluctance to change employers, while remaining in the same type of work, because of a higher-than-average concern for job security. However, tabulation of these variables (not shown here), shows no systematic relation between health and attachment. Similarly, we had anticipated that degree of attachment would be related to marital status and number of dependents. In this case, we were prepared to find either relationship, since the presence of dependents should make a young man more security conscious (and thus more highly attached) and more money conscious (and thus less highly attached). The data, however, show no consistent relationship between the two variables. We also were rather disappointed at the absence of a relationship between level of

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[8] In the study of the older males, the question on which this variable was based was "What would you say is the more important thing about any job--good wages or liking the kind of work you are doing?" In the present study, the question reads "What would you say is the more important thing to you in deciding what kind of work you want to go into, good wages or liking the work?"

Table 6.13 Reaction to Hypothetical Job Offer Outside Local Area, by Reaction to Hypothetical Job Offer Inside Area: Employed Male Wage and Salary Workers 16-24 Years of Age, by Color

(Percentage distribution)

Reaction to job offer outside area	Reaction to job offer inside area			
	Would accept at same wage or for increase less than 10 percent	Would accept for wage increase of 10 percent or more	Would not accept at any conceivable wage	Total or average
	WHITES			
Would accept at same wage or for increase less than 10 percent	38	4	8	15
Would accept for wage increase of 10 percent or more	43	68	17	50
Would not accept at any conceivable wage	20	27	75	35
Total percent	100	100	100	100
Total number (thousands)	1,384	2,213	760	4,746
	BLACKS			
Would accept at same wage or for increase less than 10 percent	29	4	15	11
Would accept for wage increase of 10 percent or more	56	73	9	62
Would not accept at any conceivable wage	14	23	76	27
Total percent	100	100	100	100
Total number (thousands)	190	493	72	821

unemployment in the local labor market and degree of job attachment, since we had hypothesized that low unemployment rates would be associated with low attachment on the ground that workers would be less security conscious in a tight labor market and thus more willing to risk a change of employer. The absence of a relationship may be attributable to the fact that our unemployment measure was based on 1960 data. We intend to examine this question again when the 1967 data become available to us.

There is some evidence that men whose families have been residents of North America for at least three generations may have weaker job attachments than those whose families emigrated more recently from Europe (Table 6.14). The same relationship was found to exist among men 45 to 59 years of age.[9] These findings are of interest because they suggest that the greater mobility of United States workers as compared with their European counterparts that some observers have noted[10] may reflect intangible cultural differences as well as international differences in labor market institutions.

Table 6.14 Proportion Highly Attached to Current Job, by Type of Occupation and Nationality: Employed White Male Wage and Salary Workers 16-24 Years of Age Not Enrolled in School

Type of occupation and nationality	Total number (thousands)	Percent highly attached
White collar		
U.S. or Canada	775	13
Europe	289	24
Other	189	16
Blue collar		
U.S. or Canada	2,209	16
Europe	624	22
Other	219	18
Total or average (1)		
U.S. or Canada	3,271	16
Europe	1,002	22
Other	457	16

(1) Total includes service and farm workers not shown separately.

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[9] Ibid., p. 161.

[10] Gladys L. Palmer, "Contrasts in Labor Market Behavior in Northern Europe and the United States," Industrial and Labor Relations Review, July, 1960, pp. 519-532.

III SUMMARY

In view of the serious labor market problems of youth, it is somewhat reassuring that an overwhelming majority of employed young men express positive feelings about their jobs--90 percent of the whites and 85 percent of the blacks. These proportions, it should be noted, are only slightly smaller than the proportions of employed men between the ages of 45 and 59 who profess to like their jobs (93 percent of the whites and 91 percent of the blacks). The differences between the two age groups become more pronounced, however, especially for the blacks, when one compares the proportions of highly satisfied workers, i.e., those who say that they like their jobs very much. Among the youth, these highly satisfied workers comprise 51 percent of the whites and 35 percent of the blacks, compared with 58 percent and 51 percent, respectively, of the older group of white and black workers. Youth in white-collar jobs are more likely than blue-collar workers to register very high satisfaction. This is particularly true for black youth. Irrespective of occupational category, the blacks are substantially less likely than the whites to register high satisfaction. This, incidentally, also is different from the pattern manifested by the 45-59 year age group, among whom the relatively smaller overall inter-color differential in satisfaction tended to disappear when type of occupation was controlled.

When asked what they particularly like about their jobs, most youth--almost three-fifths--cite factors pertaining to the nature of their work (intrinsic). As might be expected, there are occupational differences in these proportions; but, surprisingly, among white youth there is virtually no difference between the blue-collar and the white-collar groups as a whole. For example, among the whites, 58 percent of the white-collar and 56 percent of the blue-collar workers report liking best some intrinsic quality of their job. Yet, within the white-collar group, this proportion ranges between 39 percent (sales workers) and 77 percent (professional and technical workers); among blue-collar workers it ranges from 52 percent (operatives) to 62 percent (craftsmen).

Young men are more articulate about the characteristics of their jobs that they like than about those they dislike. While almost none fail to mention at least one factor that they like, about a fourth are silent when asked to mention job characteristics that they "don't like so well." Of those who do respond, a substantial majority focus on extrinsic factors, principally wages and fringe benefits and hours of work. There is an association between the job factors young men mention as being especially pleasing and the degree of satisfaction they have in their jobs; those who emphasize intrinsic qualities as the most attractive aspects of their jobs are more likely to be highly satisfied than those who refer to extrinsic factors.

On the basis of their reactions to hypothetical job offers, young men between the ages of 16 and 24 who are no longer in school evidence considerable mobility, especially as compared with men in their forties and fifties. Three-fourths of the young men, as contrasted with only two-fifths of the older group, report a willingness to move from one job to another in the local labor market for any wage increase up to 50 percent. In the case of a shift involving a change of residence, the difference is even more pronounced: about two-fifths of the young men, but only one-fifth of the older group, state that they would make such a move in response to a wage differential of up to 50 percent. In spite of the greater willingness of youth in general to accept job changes in the locality than outside of it, it is particularly interesting to note that a sizeable number of young men state that they would take a new job only if it involved leaving town.

There is little, if any, variation in job attachment according to age and length of service within the rather narrow age limits under consideration. None of the young men have accumulated enough tenure in their jobs for length of service to manifest the strong influence that it does in the case of older men. As would be expected, degree of satisfaction with one's job is related to level of attachment, but there is enough variation to confirm our theoretical expectation that these are different dimensions of job attitude. It is possible for highly satisfied workers, in other words, to have relatively low attachment; conversely, workers less than completely satisfied can be highly attached. Another attitudinal measure related to degree of job attachment is the relative importance attached to wages versus the intrinsic character of the work. Those who place the former higher in their value scale are more likely than those who emphasize the latter to indicate a willingness to move for higher wages.

Black youth appear to be less highly attached to their current job than their white counterparts. The differentials tend to exist in virtually all tabulations, and seem to be stronger and more persistent than those that characterized the older men. Nevertheless, as was also true for the older group, among youth in professional and technical jobs there is virtually no color differential in attachment.

We cannot, of course, be certain that our measure of job attachment is really measuring propensity to make interfirm moves. This question, together with the test of our conceptual framework, will be important subjects for investigation in our follow-up studies of the age cohort.

CHAPTER SEVEN*

EDUCATIONAL AND OCCUPATIONAL ASPIRATIONS

An important objective of our longitudinal study of young men is to gain a better understanding of the process of occupational choice. We accept the view expressed by many students of the subject that occupational choice is actually a developmental process beginning in early childhood and evolving through a sequence of life stages; that it involves a series of decisions related to education and work made over a period of years; that it is largely irreversible, since decisions at any point in time frequently are circumscribed by previous ones; and that the total process--involving role playing, exploratory experiences, and possibly counseling--generally culminates in a compromise between an individual's tastes, preferences, and capacities and the realities of the job market.[1]

A good portion of this process can actually be observed by means of a five-year longitudinal study of the age group under consideration. Generally speaking, youngsters at the lowest end of our age cohort are just beginning their high school careers, but at the end of the five-year period will either be in the labor market, in the military service, or in college. Those in their late teens, as our study opens, have either already started their work careers or are in college; in either case, the vast majority of them will have begun their work careers by the time the study ends. Those at the upper limit of the age cohort are almost all currently in the labor market; at the end of the period they will be approaching 30 years of age, by which time one would expect the phase of labor market exploration and experimentation to have been completed and occupational commitment to have become reasonably firm. Thus, by following the educational and work careers of these several subsets of the total group over a five-year period, we should be able to observe almost the entire range of decisions that, collectively, constitute "occupational choice." Moreover, we expect to be able to describe and, hopefully, to account for the extent to which aspirations and plans are modified by actual experience both in school and in the labor market. Our purpose in this chapter is to set the stage for the longitudinal analysis by addressing ourselves to the following two questions: (1) What are the educational and occupational aspirations of youth 14-17 years old enrolled in school, and how realistic do these aspirations appear to be? (2) What demographic, social, and educational factors appear to be related to variations in the occupational goals of this group?[2]

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* This chapter was written by Robert C. Miljus.

[1] For further elaboration of occupational choice theory see: Eli Ginzberg, The Development of Human Resources (New York: McGraw-Hill, 1966), Ch. 4; David V. Tiedeman and Robert P. O'Hara, Career Development: Choice and Adjustment, College Entrance Examination Board, Research Monograph, No. 3, 1963; Donald E. Super, et al., Career Development: Self-Concept Theory, College Examination Board, Research Monograph, No. 4, 1963; W. H. Form and D. C. Miller, "Occupational Career Pattern as a Sociological Instrument," American Journal of Sociology (January, 1949), pp. 317-329.

The educational goals of youngsters enrolled in school were ascertained by asking them how much more education they would like to get. Responses indicating a desire for education beyond high school were coded as two years of college (completing junior college or equivalent), four years of college (a baccalaureate degree), six years of college (master's degree or equivalent), or seven or more years of college (Ph.D., M.D., law degree, etc.). In addition, respondents were asked, "As things now stand, how much more education do you think you will actually get?" and these responses were coded in the same way.

Occupational goals were ascertained by means of the following question: "Now I would like to talk to you about your future job plans. What kind of work would you like to be doing when you are 30 years old?" Where the response was some occupation other than the one in which the (employed) young man was currently serving, he was asked how good a chance he thought he had of actually getting into such work. Irrespective of the answer to this question, all respondents were asked what type of work they thought they would be doing at age 30 if they could not achieve their first choice.

I EDUCATIONAL ASPIRATIONS AND EXPECTATIONS

Educational Aspirations

Of the youngsters 14-17 years of age enrolled in either elementary or high school--of whom 95 percent are in grades 9-12--a substantial majority claim they would like to have at least some college study (Table 7.1). Only 26 percent of the whites and 34 percent of the blacks will be satisfied with a high school diploma. A very small fraction--under 1 percent of the white youth and 2 percent of the black--want to leave school before acquiring a high school diploma. Virtually identical proportions of white and black youth express a desire for two years of college (12 and 14 percent, respectively) and for four years of college (44 and 42 percent, respectively). But twice as large a proportion of whites as of blacks want more than a baccalaureate degree (18 percent versus 9 percent).

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[2] Attention is confined to this group of students in the present report for both methodological and substantive reasons. They are sufficiently numerous and sufficiently homogeneous with respect to age and educational attainment to permit reliable analysis. Moreover, these youth are in the critical formative stage of their career planning, when occupational goals are beginning to crystallize and when crucial decisions about the nature and extent of additional education are being made.

Table 7.1 Educational Aspirations: Males 14-17 Years of Age Enrolled in Elementary or High School, by Color

(Percentage distribution)

Number of years of education desired	WHITES	BLACKS	TOTAL
Less than 12	1	2	1
12	26	34	27
14	12	14	12
16	44	42	43
More than 16	18	9	16
Total percent	100	100	100
Total number (thousands)	5,298	827	6,125

The educational aspirations of those still in school, if realized, would imply a rate of college exposure for the entire 14 to 17 year age cohort that is substantially higher than that actually achieved in recent years. As evident from the data in Table 7.1, a total of over 4.3 million male youth 14-17 years of age, currently enrolled in elementary and high school, would like to enter college. In addition, there are approximately half a million youth in this same age category who are currently enrolled in college. Thus, a total of 4.8 million youth (66 percent) of the 7.3 million in the age cohort currently are enrolled in college or want to be after finishing high school. This compares with about 41 percent of the 20-24 age group who either currently are enrolled or have completed a year or more of college. Hence, if the desires expressed by the current 14-17 age group were to be realized, the proportion of the 20-24 age group with some college would increase by 25 percentage points over the next six years. This is a much greater increase than is probable even taking into account the substantial increases in college enrollments that have occurred in recent years.[3]

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[3] Between 1964 and 1967 the proportion of males 20-24 years of age who had completed at least one year of college increased from 33 percent to 38 percent. U. S. Department of Commerce, Current Population Reports, Series P-20, No. 169, pp. 9-10; No. 138, pp. 10-11.

One arrives at a rather different picture, however, by looking at the 14-15 year olds and the 16-17 year olds separately (Table 7.2). Of those currently in elementary and high school, the "college aspiration rates" of these two age categories are very close--72 percent for the younger group and 70 percent for the older group. But these percentages convey a misleading impression so far as the age categories as a whole are concerned, since a larger proportion of the 16-17 year olds than of the 14-15 year olds are already in college and also because a larger proportion of the older age group has withdrawn from school entirely, either upon graduating from high school or by dropping out before completing their secondary education. When both these factors are taken into account, the "college aspiration rate" for the total group of 14-15 year olds turns out to be perceptibly higher than for the 16-17 year olds--71 percent versus 62 percent.[4]

This has two implications. First, it means either that there has been a very rapid rise in aspiration levels over the past two years such that the educational goals of the current crop of 14-15 year olds are higher than those which the current 16-17 year cohort would have expressed two years earlier or, what seems more likely, that the educational goals of youngsters change sometime between 14 and 17 years of age. Second, if the latter explanation of the difference between the two age groups is valid, it means that using the aspiration rate for the entire 14-17 year age group rather overstates the desires of the group as of the time they are actually in a position to implement a decision to go to college.[5]

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[4] The relationship between the four ratios alluded to in this paragraph is specified by the following identity. For any age group let X_1 be the proportion of students in elementary or high school who aspire to go to college, X_2 the proportion of the age group not in school, X_3 the proportion enrolled in college, and X_4 the proportion of the age group who either are enrolled in college or aspire to go to college. Then,

$$X_4 = X_1 \ (1-X_2-X_3) + X_3$$

If more than one-half of the students in elementary and high school aspire to go to college, then equal percentage point increases in both X_2 and X_3 will cause X_4 to decrease.

[5] When desires thus are overstated, it follows that the relative increase in the college enrollment ratio necessary to accommodate aspirations also is overstated. Actually the estimate of this relative increase is influenced not only by the impact of age on aspirations within the 14-17 year age group, but also by the fact that for men 18 years or older the proportion with some college decreases as age increases: 48 percent of men 18-19 years old, 45 percent of men 20-21 years old, and 38 percent of men 22-24 years old are either enrolled in or have had some college. Thus, to accommodate the aspirations of the 16-17 year olds would require an increase in enrollment ratios of 29 percent over those realized by 18-19 year olds, 38 percent over those realized by the 20-21 year olds, and 63 percent over those realized by the 22-24 year olds.

Table 7.2 Aspired and Expected College Enrollment Ratios, by Age: Males 14-17 Years of Age, by Color

Aspired and expected college enrollment ratios	WHITES			BLACKS			TOTAL		
	14-15	16-17	Total 14-17	14-15	16-17	Total 14-17	14-15	16-17	Total 14-17
Proportion enrolled in college	(a)	14	7	(a)	7	3	(a)	13	6
Proportion not enrolled in school	2	16	9	5	23	14	2	17	9
College aspiration rate for students in elementary or high school(1)	73	71	73	66	62	64	72	70	72
Expected college enrollment rate for students in elementary or high school(2)	65	62	64	52	54	53	63	61	62
Overall college aspiration rate(3)	72	64	68	63	51	56	71	62	67
Overall expected college enrollment rate(4)	64	58	61	49	45	47	62	56	59

(a) The proportion is less than one-half of one percent.
(1) The proportion of elementary and high school students who aspire to go to college.
(2) The proportion of elementary and high school students who expect to go to college.
(3) The proportion of an age group who either are enrolled in college or aspire to go to college.
(4) The proportion of an age group who either are enrolled in college or expect to go to college.

Educational Expectations

But the matter does not stop here, since a far from negligible number of the young teenage students themselves realize that their educational aspirations are somewhat unrealistic (Table 7.2). When they talk about what they expect, rather than what they would like to have, only 63 percent of the age cohort enrolled in elementary and high school regard themselves as candidates for college, as compared with the 71 percent who say they would like to go. Adjusting for those already attending college and for those not enrolled in school, this amounts to an expected enrollment ratio for the entire age cohort of about 59 percent--61 percent for the whites and 47 percent for the blacks.

As was true in the case of the "aspired enrollment rate," there also is a fairly substantial difference in "expected enrollment rate" between the 14-15 year olds and the 16-17 year olds. For both color groups combined, the expected enrollment rate of the older group is 56 percent compared with 62 percent for the younger group. The corresponding figures for the whites are 58 percent and 64 percent; for the blacks, 45 percent and 49 percent.

Using as a criterion the achieved college enrollment rates for the 18-19 year olds who are no longer in high school, the expectations of the current crop of 16-17 year olds do not appear to be unrealistic, at least for the whites. Among all white youth 16-17 years old, as has been seen, 56 percent either are currently enrolled in college or are in elementary or high school and expect to have some college education. This compares with 51 percent of the total group of 18-19 year olds who are either currently enrolled or have had some college work.[6] However, there is less reason to be sanguine about the prospects of the black youth realizing their expectations. Only 24 percent of the 18-19 year olds either are enrolled in college or have had some college work, but the expectation rate of the 16-17 year olds is 45 percent.

Thus far the discussion of the relationship between educational aspirations and expectations has focused exclusively on the difference between the desire and the expectation of achieving some exposure to college. This tends to understate the number whose aspirations exceed their expectations, however, since a good number of those who expect to get to college, nevertheless do not anticipate getting as much education as they desire (Table 7.3). Considering white youth, for example, only 12 percent of all those who aspire to some college study do not expect to achieve their goals. However, of those who want a baccalaureate degree, one-fifth do not expect to achieve it. Of those who would like some graduate education, almost three out of ten expect to be disappointed.

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[6] Two important omissions cause this statistic to be biased. First, there is a downward bias because it does not include high school students in this age group who eventually will go to college. Second, there may be a bias in the opposite direction caused by the fact that the percentage is based on the civilian population, since our data indicate that veterans are less likely to enter college than nonveterans and since a substantial proportion of 18 to 19 year olds are in the armed forces. However, it is entirely possible that recent changes in draft regulations or other factors may alter these past relationships between veteran status and college enrollment.

In the case of the blacks, the pattern is similar. While, overall, less than a fifth of those who aspire to some college study do not expect to get beyond high school, almost three out of ten who want college degrees expect to stop short of them, and over a fifth of those who want to proceed to graduate studies do not expect to do so. As is implied by the foregoing, the difference between expectations and aspirations is somewhat greater for the blacks than for the whites. However, this is solely the result of the larger proportion of blacks than of whites who expect to be disappointed in their quest for a college degree. Actually, relatively more blacks than whites who aspire to two years of college or to graduate work expect to fulfill their aspirations.

II OCCUPATIONAL ASPIRATIONS

Desired Occupation at Age 30

Table 7.4 shows how white and black youth enrolled in each of the four years of high school are distributed according to the occupation they hope to be in at age 30. Neglecting for a moment the implications of the overall distribution and focusing on comparisons by color and by year in school, several interesting observations can be made. First, a large majority of youngsters in each year of school are able and willing to state a specific occupational goal, but as many as a fifth of the total group are not. This proportion is considerably higher among freshmen (over one-fourth) than among seniors (about one-eighth). It is rather curious that the decline in the proportion of young men who are as yet undecided about the occupation they wish to pursue is not continuous. There is a perceptible drop between freshmen and sophomores and another between juniors and seniors, but not much difference between those in their sophomore and junior years.

Second, there is not a great deal of difference between the occupational aspirations of white and black youth--certainly not nearly so much as there is between actual occupational distributions of 30-year-old blacks and whites currently in the labor force. Black youngsters, particularly those in their freshmen and sophomore years, appear to be somewhat more likely than whites to be able to specify an occupational goal. But of all those who do indicate their preference, the pattern of choice is remarkably similar between the two color groups. Of those

Table 7.3 Amount of Education Youth Expect to Receive, by Educational Aspirations: Males 14-17 Years of Age Enrolled in Elementary or High School Who Have College Aspirations, by Color

(Percentage distribution)

Amount of education expected (years)	14 years	16 years	More than 16 years	Total or average
		WHITES		
12 or less	27	12	3	12
14	72	8	3	17
16	2	79	22	53
More than 16	0	2	72	18
Total percent	100	100	100	100
Total number (thousands)	625	2,289	926	3,840
		BLACKS		
12 or less	24	19	4	18
14	74	8	8	22
16	2	72	10	49
More than 16	0	1	78	11
Total percent	100	100	100	100
Total number (thousands)	111	348	72	531

Table 7.4 Occupation Desired at Age 30, by Year of School Attending: Males 14-17 Years of Age, Enrolled in High School, by Color

(Percentage distribution)

Occupation desired at age 30	WHITES					BLACKS				
	Freshmen	Sophomores	Juniors	Seniors	Total or average	Freshmen	Sophomores	Juniors	Seniors	Total or average
White collar	49	57	57	58	56	43	58	54	61	54
Professional and technical	40	51	47	48	47	33	48	46	45	44
Nonfarm managers and proprietors	5	3	6	8	5	4	6	2	4	4
Clerical and sales	4	3	3	3	3	6	2	4	11	6
Blue collar	16	15	17	21	17	30	23	21	25	24
Craftsmen and foremen	12	11	14	18	14	22	14	16	13	16
Operatives and nonfarm laborers	4	4	3	3	4	8	9	5	12	9
Other (1)	7	7	7	8	7	4	3	4	3	4
Don't know	28	20	19	13	20	23	15	21	11	18
Total percent	100	100	100	100	100	100	100	100	100	100
Total number (thousands)	891	1,536	1,471	1,169	5,066	157	231	207	129	725

(1) Other includes service, farm, and armed forces occupations not shown separately.

who specify an occupational goal, 59 percent of the whites and 53 percent of the blacks aspire to professional or technical jobs; 10 percent and 12 percent, respectively, hope to be in other white collar jobs.[7] Skilled manual work is mentioned by 18 percent of the whites and 20 percent of the blacks. Very few of the youth--9 percent of the whites and 5 percent of the blacks--aspire to service work, farm occupations, or occupations in the military.

A third observation based on the data in Table 7.4 is that, except for the increasing proportion of youth who decide upon an occupational goal as they progress through high school, there is not much difference in the occupational aspirations of youngsters who are in different years of high school. The notable exception to this generalization, as has already been implied, is the substantial difference between the aspirations of black youngsters in their freshman year and those in the higher grades. Considering only those black youth who specify occupational goals, freshmen are less likely than those in higher grades to aspire to white-collar occupations and are correspondingly more likely to choose blue-collar occupations. The fact that this difference exists for the blacks, but not for the whites, may mean that high school has a greater effect on black than on white youth in creating an awareness of white-collar life styles.

Perhaps the most striking feature of the occupational aspirations of the high school youth is the substantial proportion who would like to be in professional or technical occupations when they reach 30 years of age. Overall, almost half of the youngsters--47 percent of the whites and 44 percent of the blacks--specify a type of work that falls in the professional and technical major occupation group. Given that only about one-eighth of employed males currently serve in these occupations, and that even among the best-educated age cohort 25 to 34 years of age the proportion is only 17 percent,[8] it is virtually certain that the desires of substantial numbers of the youth under consideration will not be fulfilled, even allowing for a continuation of recent trends in the occupational structure of the labor force.

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[7] In his questionnaire survey of a national sample of school youth, James S. Coleman also found the educational and occupational aspirations of Negro youth (twelfth grade in high school) to be quite high, and in many cases, similar to those of white youth. See his Equality of Educational Opportunity (Washington: U.S. Government Printing Office, 1966), pp. 217-333. For summaries of other research comparing white and black aspirations see: Meyer Weinberg, Desegregation Research: An Appraisal (Bloomington, Indiana: Phi Delta Kappa, 1968), Chapter 3; and William P. Kuvlesky and Michael F. Lever, Occupational Status Orientations of Negro Youth: Annotated Abstracts of the Research Literature, Texas A&M University, Department of Agricultural Economics and Sociology Technical Report No. 67-2, June, 1967, pp. 24-38.

[8] Computed from U.S. Department of Labor, Labor Force and Employment in 1965, Special Labor Force Report No. 69, Table C-8, p. A-23.

Relationship between Occupational and Educational Aspirations

In the aggregate, the occupational aspirations of students 14-17 years of age appear to be commensurate with the amount of additional education that the total age group desires, but there are some anomalies when educational and occupational goals are related (Table 7.5). The 62 percent of the white and 51 percent of the black youth who want college degrees are not far out of line with the 52 and 48 percent, respectively, who aspire to professional and managerial occupations. The overwhelming majority of those who want to be in white-collar jobs at age 30 hope to enter college--90 percent of the whites and 84 percent of the blacks. Those who want to be in blue-collar occupations are much less likely to want to have any formal education beyond high school--36 percent of the whites and 42 percent of the blacks. But one wonders about the relatively high proportions of those with blue-collar aspirations who, nevertheless, hope to have college degrees. This proportion is 20 percent in the case of the whites and 27 percent in the case of the blacks. In fact, included in these totals are 3 percent of each color group who want to obtain more than four years of college. This entire question of the relationship between educational and occupational aspirations is one to which we expect to give more attention when we have an opportunity to examine the occupational data at the 3-digit level of detail.

It is noteworthy that youngsters who are as yet undecided about the occupation they wish to pursue, nevertheless, are able to indicate the amount of education they wish to obtain. Moreover, among white youth, those undecided about the specific type of work they desire have educational goals not far different from the average, except for a smaller proportion who want more than four years of college. On the other hand, among black youth undecided about occupations, there is a considerably higher-than-average proportion who do not aspire to any college work.

Expectations of Achieving Occupational Goals

One suspects that wanting to be in a particular occupation at age 30 is not the same thing to many teenagers as actually *expecting* to be in that occupational role. As has been seen, there are fairly substantial disparities between educational aspirations and expectations, which doubtless affect the prospects of a young man's being able to prepare himself for the occupation he most desires.

A substantial number of youngsters who are able to name the occupation in which they would like to be at age 30 do not think their chances of achieving this goal are very good (Table 7.6). Overall, about three-tenths of the youngsters, irrespective of color, perceive their chances of achieving the desired occupation to be only fair or poor. Surprisingly,

Table 7.5 Educational Aspirations, by Occupation Desired at Age 30: Males 14-17 Years of Age Enrolled in Elementary or High School, by Color

(Percentage distribution)

Educational aspirations (years)	White collar	Blue collar	Service and farm	Don't know(1)	Total or average
	WHITES				
12 or less	10	64	49	30	27
14	9	16	17	14	12
16	52	17	28	49	44
More than 16	29	3	7	7	18
Total percent	100	100	100	100	100
Total number (thousands)	2,797	1,031	265	1,204	5,298
	BLACKS				
12 or less	16	58	46	53	36
14	13	14	24	12	14
16	56	24	31	33	42
More than 16	15	3	0	2	9
Total percent	100	100	100	100	100
Total number (thousands)	414	223	19	171	827

(1) Don't know includes both don't know and not ascertained. Of this group fewer than 1 percent do not know their educational goals.

Table 7.6 Perceived Chances of Achieving Occupational Goals, by Occupation Desired at Age 30: Males 14-17 Years of Age Enrolled in High School, by Color (1)

(Percentage distribution)

Perceived chances of achieving desired occupation	White collar				Blue collar			Other (2)	Total or average
	Professional technical	Nonfarm managers and proprietors	Clerical	Total or average	Craftsmen foremen	Operatives and nonfarm laborers	Total or average		
	WHITES								
Excellent	12	26	10	13	14	11	14	20	14
Good	59	48	47	57	54	48	53	55	56
Fair or poor	29	26	42	30	32	42	34	24	30
Total percent	100	100	100	100	100	100	100	100	100
Total number (thousands)	2,296	261	161	2,718	634	166	800	314	4,004
	BLACKS								
Excellent	11	10	8	10	14	8	12	18	11
Good	56	60	48	56	57	63	59	67	57
Fair or poor	33	30	45	34	28	30	29	15	32
Total percent	100	100	100	100	100	100	100	100	100
Total number (thousands)	313	30	40	382	114	60	174	26	593

(1) Excludes those who were unable to name an occupation desired at age 30 and those who desire an occupation that is the same as their current or last occupation.

(2) Other includes service, farm, and armed forces occupations not shown separately.

the degree of confidence they express in their ability to achieve their occupational goals is largely independent of the major occupation group of the type of work they desire. Among whites, the proportion of youngsters describing their chances as fair or poor ranges between 24 and 30 for all occupational aspiration categories in which numbers are large enough for a reliable estimate. Among blacks, in the categories with sufficiently large numbers of observations for reliable estimates, the range is equally narrow--from 28 to 34 percent. It is especially interesting that those who aspire to professional or technical jobs are generally as confident as those with other occupational goals of realizing their ambitions. This is true for both white and black youth.

There is little if any tendency for black youth to be more pessimistic than white youth about achieving their occupational goals. Eleven percent of the black teenagers, as compared with 14 percent of the white, regard their chances to be "excellent"; and 32 percent of the blacks, compared with 30 percent of the whites, say their chances are only fair or poor. Among those who are looking forward to blue-collar jobs, black youth are actually somewhat more optimistic about achieving their goals than the white.

A variety of reasons is given by those who think the chance of attaining their specified occupational goal is only fair or poor (Table 7.7). Overall, in about one case in six the cause of the doubt appears to be not a perceived obstacle to the attainment of the goal, but rather the feeling on the part of the youngster that he may change his mind. On the other hand, about 30 percent of the youth cite academic deficiencies as the source of their doubts about attaining occupational goals. This is most commonly mentioned by those aspiring to white-collar jobs. There is an interesting difference between whites and blacks in this respect. Among whites, poor grades are more likely than among blacks to be singled out as the barrier to the achievement of occupational goals. Thus, among those aspiring to white-collar jobs who feel that their chances are only fair or poor, 22 percent of the whites allude to poor grades and 16 percent to "lack of education"; among blacks the corresponding proportions are 12 and 22 percent.

Reasons for Preferred Occupations

When asked the reason for their specific occupational goal, a great majority of high school youth irrespective of color indicate that intrinsic factors (i.e., "the nature of the work,""find it enjoyable") are most important. Around 80 percent of the whites and 71 percent of the blacks mention intrinsic factors. Most of the remaining youth explain their choice in terms of their belief that they have the necessary talent or ability to perform the work or in terms of the economic rewards of the occupation. Although the proportion who give economic reasons is small, blacks (8 percent) are twice as likely as whites to mention this reason.

Table 7.7 Reasons for Doubts about Realizing Occupational Goals, by Type of Occupation Desired at Age 30: Males 14-17 Years of Age Enrolled in High School Who Believe Chances of Attaining Occupational Goals Are Fair or Poor, by Color(1)

(Percentage distribution)

Reason for doubts	White collar	Blue collar	Other(2)	Total or average
	WHITES			
Poor grades	22	9	6	18
Lack of education	16	8	1	13
Lack of experience	5	20	17	9
May change mind	16	21	17	17
All others	41	42	59	43
Total percent	100	100	100	100
Total number (thousands)	810	275	81	1,242
	BLACKS			
Poor grades	12	4	0	9
Lack of education	22	16	25	21
Lack of experience	10	50	25	21
May change mind	19	5	25	15
All others	37	24	25	33
Total percent	100	100	100	100
Total number (thousands)	132	50	4	193

(1) Excludes those who were unable to name an occupation desired at age 30 and those who desire an occupation that is the same as their current or last occupation.

(2) Other includes service, farm, and armed forces occupations not shown separately.

III CORRELATES OF HIGH OCCUPATIONAL ASPIRATION

As has been seen, almost half of the young teenage males 14-17 years of age who are enrolled in high school aspire to occupations in the professional and technical category. In this section, we investigate the factors that appear to be associated with the choice of high status careers. The professional and technical occupation group is taken to represent "high status" jobs because, for the labor force as a whole, it contains a higher proportion of college educated workers than any other occupational category and because average earnings are higher than in any other category.

Family Background

The likelihood of a high school youth's aspiring to a professional or technical career is directly related to the degree of urbanization of the community in which he lives (Table 7.8).[9] Among whites, rural farm youth have the smallest percentage with such aspirations (34 percent) followed by those in towns or small cities (48 or 49 percent), and those in large cities (54 percent) and suburbs (51 percent). The pattern for black youth is very much the same, although rural nonfarm youth are slightly less likely than those on farms to want to be professional or technical workers. There are not enough black youth living in suburbs to provide a meaningful estimate. Some of these differences in occupational aspirations between rural and urban youth are doubtless attributable to variations in character of education, socioeconomic status, and value systems. In addition, the environment of the latter brings a much larger number and variety of occupations to their attention. Hence, urban youth are more likely to learn about the content of these occupations, their status in the prestige hierarchy, their rewards and satisfactions, and their entry requirements.

Socioeconomic status of family, as reflected by the type of occupation of head of household when the youth was 14 years of age, has a pronounced effect on the occupational aspirations of the young men under consideration. Sons of white-collar workers are more likely than those of blue-collar workers to aspire to professional or technical careers. In the case of whites, the respective proportions are 55 percent and 45 percent; for the blacks, they are 66 percent and 46 percent. Thus, while there is no

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[9] Other studies also find that small town and rural youth generally have lower levels of aspiration than urban youth. See: Lee G. Burchinal, Career Choices of Rural Youth in a Changing Society, North Central Regional Publication No. 142, Bulletin 458 (St. Paul: Minnesota Agricultural Experiment Station, 1962); A.O. Haller and W.H. Sewell, "Farm Residence and Levels of Occupational and Educational Aspirations," American Journal of Sociology, Vol. 62 (1957), pp. 407-411.

Table 7.8 Proportion Who Aspire to Professional or Technical Occupations at Age 30 and Proportion Undecided on Occupational Goal, by Selected Aspects of Family Background: Males 14-17 Years of Age Enrolled in High School, by Color

Aspect of family background	WHITES			BLACKS		
	Total number (thousands)	Percent aspiring to professional or technical occupations	Percent undecided	Total number (thousands)	Percent aspiring to professional or technical occupations	Percent undecided
Residence at age 14						
Rural farm	619	34	19	97	34	31
Rural nonfarm	500	41	23	68	30	21
Town (under 25,000)	1,568	49	20	153	46	17
Suburb	514	51	16	15	20	27
Small city (25,000-100,000)	856	48	21	109	48	23
Large city (100,000 or over)	994	54	18	283	56	14
Total or average	5,066	47	20	725	44	18
Occupation of head of household when youth was age 14						
White collar	1,896	55	20	67	66	17
Blue collar	2,126	45	18	355	46	18
Other (1)	715	34	25	209	38	17
Total or average	5,066	47	20	725	44	18
Exposure to reading material at age 14						
Had library card, newspapers, magazines	3,416	53	20	259	51	16
Lacked one or more	1,636	35	20	464	40	18
Total or average	5,066	47	20	725	44	18
Nationality						
U. S. or Canada	3,359	45	21	(2)		
North or West Europe	105	40	34			
Central or East Europe	767	46	18			
South Europe	396	56	20			
Latin America	349	62	11			
Other	83	52	20			
Total or average	5,066	47	20			

(1) Other includes service, farm, and armed forces occupations.

(2) Nationality not computed for blacks due to predominantly U.S. heritage.

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difference in level of occupational aspiration between white and black youth who come from blue-collar families, the black youth from white-collar families are more likely than the white to have professional or technical aspirations. Youngsters of both color groups, from families headed by farm or service workers are least likely of all to aspire to professional or technical careers.

Another socioeconomic measure that is even more strongly correlated with occupational aspirations is the extent to which the youngster (at age 14) had ready access to reading material in the home. Of those whose families had library cards and regularly received both magazines and newspapers, over half of both whites and blacks wish to be in professional or technical jobs at age 30. Among those whose families lacked any one or more of these forms of written material, only a third of the whites and two-fifths of the blacks had such high aspirations.

Among whites, the national origin of the youth's family also appears to be related to his occupational aspirations. Those youngsters whose parents or grandparents originated in Southern Europe or in Latin America appear to be more likely than other youngsters to want to be professional or technical workers. Youth whose nationality is Latin American are also the least likely to be undecided about the occupation they want--only one in ten does not specify an occupational goal.

Educational Characteristics

There are a number of aspects of high school experience that are related to the type of occupation a high school student specifies as his goal. Many of these explanatory variables are themselves intercorrelated, and it is not clear at this juncture which of them exercise independent effects. Nevertheless, the gross relationships between occupational aspiration and high school curriculum, attitude toward school, favorite subject, amount of time spent on homework, and favorite out-of-school activity are shown in Table 7.9.

It hardly is surprising that those in the college preparatory high school curriculum are by far the most likely to aspire to professional or technical occupations. What is perhaps unexpected is that the proportion of black youth in this curriculum who want to be professional or technical workers is even higher than the corresponding proportion of white youngsters--73 percent versus 64 percent. Both color groups in the general curriculum have the next highest proportion with aspirations for a professional or technical career--36 percent. Even in the vocational curriculum, a fourth of the whites and almost a third of the blacks aspire to the highest level occupations--an aspiration that would appear to be of rather questionable realism.

There also are differences in the extent of indecision as to career among those in different curricula. Both white and black youngsters in the college preparatory curriculum are more likely to have a specific

Table 7.9 Proportion Aspiring to Professional or Technical Occupations at Age 30 and Proportion Undecided on Occupational Goal, by Selected Educational Characteristics: Males 14-17 Years of Age Enrolled in High School, by Color

Educational characteristic	WHITES			BLACKS		
	Total number (thousands)	Percent aspiring to professional or technical occupations	Percent undecided	Total number (thousands)	Percent aspiring to professional or technical occupations	Percent undecided
High school curriculum						
Vocational	433	26	6	84	31	17
Commercial	136	21	30	28	32	17
College preparatory	2,147	64	17	161	73	6
General	2,169	36	24	433	36	22
Total or average	5,066	47	20	725	44	18
Favorite high school subject(1)						
Humanities	603	46	19	136	38	14
Social science	739	52	19	105	55	14
Science	741	59	18	90	57	20
Mathematics	902	53	19	113	50	18
Vocational	710	39	12	58	33	18
Other(2)	341	46	20	54	45	8
None	61	20	35	4	22	61
Total or average	4,176	49	18	568	47	16
Nonschool activity engaged in most (1)						
Sports	1,016	48	22	168	52	11
Hobby	563	50	13	40	52	10
Reading	199	70	8	45	72	5
Work for pay	572	48	18	78	31	28
All others	1,612	47	18	195	43	20
Total or average	4,176	49	18	568	47	16
Hours per week spent on homework (1)						
4 or less	1,010	41	19	107	35	17
5-9	1,720	47	18	233	42	21
10-14	1,018	58	16	169	56	11
15 or more	377	55	18	55	64	6
Total or average	4,176	49	18	568	47	16
Reaction to high school experience (1)						
Like it very much	1,723	57	16	318	46	13
Like it fairly well	2,150	43	20	240	47	20
Dislike it	247	40	16	7	88	0
Total or average	4,176	49	18	568	47	16

(1) Includes only those who have completed one year of high school.

(2) Other includes foreign languages, commercial, and miscellaneous.

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occupational goal than those in the general curriculum. Whites who are pursuing vocational curricula are least likely to be undecided.

Students whose favorite subjects are science, mathematics, and social science are more likely to aspire to professional or technical occupations than those who prefer humanities, vocational subjects, or others. The pattern is remarkably similar for black and white youngsters, although there are too few of the latter in several of the categories to permit confident conclusions.

Very few youngsters 14-17 years of age name reading as the nonschool activity that accounts for most of their time; but "readers" are considerably less likely than others to be undecided about the occupation they hope to be in at age 30 and are considerably more likely than others to aspire to professional or technical careers. Compared to the average of 49 percent of the white youth who want to be in professional or technical occupations, 70 percent of those who spend most of their time reading have such aspirations. Compared to the average of 18 percent who are undecided about their career, only 8 percent of the "readers" are unable to specify an occupational goal. Among black youth the same type of relationships prevail. Of those whose chief out-of-school activity is reading, 72 percent aspire to professional or technical occupational goals and only 5 percent are undecided, as compared with the overall averages of 47 percent and 16 percent, respectively. In the case of white youngsters there are no other marked differences related to out-of-school activity. Black youth, on the other hand, whose chief activity is working for pay have an above average proportion who are undecided about future occupation, and a below average proportion who wish to pursue professional or technical work.

Among both white and black youth there is a direct relationship between the amount of time the youngster devotes to his homework and the likelihood of his aspiring to a professional or technical career. Among white youth who spend fewer than four hours per week on homework, 41 percent wish to be in professional or technical jobs at age 30. This proportion rises to over 55 percent of those who spend ten or more hours per week on homework. The same tendency exists among black youth. It is interesting that the inter-color difference in the proportion with aspirations for high status jobs disappears as hours per week devoted to homework increase. Among those spending fewer than five hours a week, a larger proportion of whites (41 percent) than of blacks (35 percent) want to enter professional or technical careers. For those who spend over ten hours per week on homework, almost three-fifths of both color groups have such high level aspirations.

Desire for a professional or technical career is related to the degree of positive feelings the white youngster expresses about his high school experience, but this pattern does not prevail among the black. Of the white youth who say they like their high school experience very much, 57 percent aspire to professional or technical occupations. This compares with only 43 percent of those who "like it fairly well."

Labor Market Information

How much a young man knows about the world of work has a considerable influence on the nature of his occupational aspirations (Table 7.10). For one thing, those youngsters between the ages of 14 and 17 who scored high on the occupational information test are more likely than those with low scores to have a specific occupational goal. Moreover, of those who specify goals, youngsters with high scores are considerably more likely than the low scorers to aspire to professional or technical occupations. Among white youngsters, 25 percent of those with the least occupational knowledge are undecided about their occupational goal, as compared with 16 percent of those with the most knowledge. The corresponding proportions among the black youth are 24 percent and 3 percent. In the case of white youth there is a 25 percentage point spread between those with low and those with high scores in the proportions aspiring to professional or technical jobs (33 percent versus 58 percent). In the case of the blacks, the corresponding spread is 39 percentage points (30 percent of those with low scores and 69 percent of those with high scores). It is noteworthy that if one considers only those youth with medium and high scores on the occupational information test, the proportion of black youth aspiring to professional or technical occupations is higher than that of white. Also, the proportion undecided about career is much lower among the blacks than among the whites.

Part of the apparent influence of occupational information is probably simply a reflection of the effect of socioeconomic status, with which scores on the occupational information test are known to be correlated.[10] Nevertheless, that occupational information has some independent influence is suggested by the fact that the relationships shown in Table 7.10 are stronger than those shown in Table 7.8. Moreover, career indecision is not at all systematically related to measures of socioeconomic status but is strongly related to occupational information test scores.

IV SUMMARY

Young men between the ages of 14 and 17 who are enrolled in elementary or high school have set very high educational and occupational goals for themselves. Three-fifths of the age group say they want to obtain four or more years of college, and seven out of ten desire at least two years of college. With respect to work careers, although about one in five has not yet made up his mind, almost half say they want to be in professional or technical occupations by age 30.

On the basis of forseeable trends in college enrollment ratios and the occupational distribution of job opportunities, it is virtually certain that many of these youth will not realize their aspirations.

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[10] See *supra*, Chapter 5, Table 5.2.

Table 7.10 Proportion Aspiring to Professional or Technical Occupations at Age 30 and Proportion Undecided on Occupational Goal, by Score on Occupational Information Test: Males 14-17 Years of Age, by Color

Score on occupational information test	Total number (thousands)	Percent aspiring to professional or technical occupations	Percent undecided
	WHITES		
High	1,510	58	16
Medium	2,970	45	18
Low	1,800	33	25
Total or average	6,280	45	20
	BLACKS		
High	76	69	3
Medium	315	48	17
Low	610	30	24
Total or average	1,001	39	20

Indeed, many of the youngsters themselves seem to understand this, for their expectations are considerably more modest than their hopes, with respect to both educational attainment and occupational choice. Overall, the amount of education the youngsters in the age cohort expect to receive is still greater than what their predecessors have obtained, but not so much greater as to be patently unrealistic, given recent trends in enrollment ratios.

But while this is true in the aggregate, it is almost certainly not true for the black youth. On the average, they profess to want almost as much education as the whites and their occupational goals are only slightly more modest than those of whites. Moreover, the gap between their aspirations and their expectations is only slightly wider than that for the whites. As a consequence, while their expectations concerning education and careers are somewhat more modest than those of white youngsters, their ambitions far exceed the current achievements of young black men. Even on the basis of the most optimistic assumptions about the rate of increase in opportunities for black youth, it seems almost certain that unfulfilled expectations will be more frequent for the black teenagers than for the white.

The factors that differentiate between youth with high and those with lower occupational aspirations are very similar to those related to school attendance. Aspirations for professional or technical careers are associated with urban rather than rural residence, high socioeconomic status of family, enrollment in college preparatory curriculum, positive attitudes toward school, spending above average amounts of time on homework, and having above average knowledge of the world of work. Many of these factors, of course, are intercorrelated, and it is not possible at this stage of the analysis to be confident of the net effects of any of them.

A very interesting finding has been the interaction between color and some of the afore mentioned factors that are related to aspiration level. As has been mentioned, black youth in the aggregate only have slightly lower aspiration levels than white youth. But when one controls for some of the factors mentioned above, the aspiration level of blacks in the top categories is perceptibly higher than that of whites. For instance, the proportion of blacks aspiring to professional or technical careers is greater than that of whites in families headed by white-collar workers, among students in the college preparatory curriculum, and among youngsters with high occupational information scores.

As our longitudinal study unfolds, we shall be interested particularly in studying the relationships among aspirations, expectations, and realizations. Viewing occupational choice as a process, we shall wish to ascertain how and why aspirations change over time, the relation between the aspirations of youth and their educational and labor market decisions, and the personal and environmental factors that appear to facilitate the translation of aspirations into realizations.

CHAPTER EIGHT*

SUMMARY AND CONCLUSIONS

This volume, in a sense, is the prologue to an intensive longitudinal study of the educational and labor market experiences of young men at the thresholds of their careers. The total five-year study is designed to analyze the career choices of youth as a developmental process, including their aspirations, their educational decisions, and their early accommodation to the labor market. The longitudinal nature of the study will permit us to examine the way in which aspirations are modified during the maturation process and as the result of experiences both in the school and in the labor market. We shall be interested particularly in exploring the sources of variation in labor market experience and behavior and in the degree to which career aspirations are realized.

The previous chapters have set the stage for this longitudinal analysis by examining in depth the current school and labor market status of the total age cohort. We have examined the labor force participation and the unemployment experience of both students and nonstudents and have explored the sources of variation in these variables. The types of jobs held by employed students and nonstudents have been analyzed, including hours of work and rates of pay. A beginning has been made at studying the mobility of out-of-school youth by noting the job changes they have made in the past year as well as those since having left school. Variation in the extent of information about the world of work has been measured by means of an occupational information test, and the determinants as well as some of the labor market consequences of this variation have been explored. For employed youth not enrolled in school, we have analyzed the extent and the sources of job satisfaction and also have explored the prospective mobility of the young men as measured by their relative willingness to consider alternative jobs. Finally, for that portion of the age cohort still in elementary or high school, we have examined aspirations and expectations with respect to further education and future occupation.

The findings relating to each of these aspects of the investigation have been summarized in some detail in the concluding sections of previous chapters. In the present chapter our purpose is to integrate rather than to summarize; that is, we focus on several themes that appear to have emerged from the study as a whole, and also suggest the main thrusts of our future research as the data from the follow-up surveys become available. In addition, we draw certain comparisons and contrasts between our findings here and those of our previous study of an older cohort of men.[1]

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* This chapter was written by Herbert S. Parnes and Ruth S. Spitz.

There is probably no other age group of males between the ages of 14 and 65 in which a few years make as much difference as they do in the case of the group under consideration in this study. At age 14 the youth is hardly more than a child; he is just embarking on his secondary education and is below the legal age limit for almost all types of full-time employment; he generally has no economic responsibilities; he is just emerging from the fantasy stage of occupational aspiration and he has very little knowledge or understanding of the dimensions of the world of work. Four years later he has completed high school and, if not in the armed services, either has entered the labor market for full-time employment or has continued his education or training in preparation for a more-or-less specific work career. By age 24, he has, in the vast majority of cases, left school permanently, has typically assumed the economic responsibilities of a family, and frequently has a more-or-less firm occupational commitment.

As a consequence of this extreme variation, it is difficult if not impossible to make generalizations for the entire age cohort. Indeed, it has been rather awkward even to settle upon a designation for the total group that is equally appropriate for all of its subsets. "Young men," in some contexts, is too presumptuous a term for the 14 year olds, while "boys" is obviously inappropriate for those in their twenties. The heterogeneity of the total age cohort is also responsible for the fact that much of the analysis has dealt merely with segments of the total sample: some of the questions that have been important for those out of school (e.g., degree of attachment to current employer) would not be particularly interesting as applied to students. Conversely, an exploration of the educational and occupational aspirations of students has been easier to execute with our data and is also probably somewhat more meaningful than a similar analysis for nonstudents, particularly in view of the fact that changes in these aspirations will be studied in subsequent surveys.

Comparison of the data produced by the current survey with those generated by the Current Population Survey of the same month leads to the strong suspicion that the standard questions used to ascertain the labor force and employment status of individuals produce different estimates for male youth when directed at the youth themselves than when directed at other members of the household. For the total age group of males 14-24, the present survey measures employment at about 2.1 million (about 25 percent) higher than the estimate of the Current Population Survey for October, 1966. The number unemployed also is higher than in the CPS by about 300,000, or slightly more than 15 percent. Thus, the labor force participation rate for the age group as measured by the present survey is 15 percentage points higher than that yielded by the CPS, and the unemployment rate is 1.6 percentage points higher. Since the present survey differs from the Current Population Survey in several respects other than the source of data, we are reserving judgment on the causes of the differences in measurement until methodological investigations currently under way in the Bureau of the Census have been completed.

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[1] Herbert S. Parnes et al., The Pre-Retirement Years: A Longitudinal Study of the Labor Market Experience of the Cohort of Men 45-59 Years of Age, Vol. 1 (Columbus: Ohio State University Center for Human Resource Research, 1968).

I SOURCES OF VARIATION IN EDUCATIONAL AND LABOR MARKET EXPERIENCE

Labor Market Status of Students and Nonstudents

There are such profound differences in labor market characteristics between youth enrolled in school and those not enrolled that it is frequently not very meaningful to present labor force and employment statistics for the total group without a breakdown by school enrollment status. Data for young men 18-19 years of age are illustrative. The group is divided relatively equally between those enrolled in school (56 percent) and those not enrolled. The former are only three-fifths as likely as the latter to be in the labor force; but, considering only those who are economically active, students are about three times as likely as nonstudents to be unemployed. Among the employed, those enrolled in school are more than four times as likely to be working only part time as those who are not. They are three times as likely to be employed in white-collar jobs, and are less than half as likely to be employed in goods producing industries.

Color Differences

There is scarcely an aspect of the educational and labor market experience of young males in which pronounced differences between whites and blacks do not exist. Age for age, black youth are less likely than white youth to be enrolled in school. The difference becomes more pronounced as age increases. Among those enrolled, whites tend to be slightly more advanced relative to their age than blacks. They are considerably more likely than blacks to be enrolled in college preparatory courses in high school. Black youth tend to have lower labor force participation rates than white and higher unemployment rates. Of those out of school, the educational attainment of blacks is lower than that of whites. Blacks are more likely than whites to be found in the lower occupational categories. This difference prevails both in the case of students and nonstudents and is much greater than can be accounted for on the basis of differences in number of years of school completed.

Finally, the 40 percent higher hourly rates of pay earned by whites between the ages of 20 and 24, as compared with blacks of the same age, appear to be only in very small part attributable to differences in their major occupation category and/or differences in the number of years of school completed.

There are less tangible differences, also, between white and black youth. The latter are much less likely than the former to manifest a high degree of satisfaction with their current jobs. This tends to be true irrespective of type of occupation (white-collar or blue-collar) and irrespective of level of educational achievement. Black youth also appear to be less highly attached to their current jobs than their white counterparts. Finally, black youth have considerably less extensive labor market information than white youth, whether the measure is based upon knowledge about occupations or knowledge about relevant employers in the area. This difference, incidentally, is very pronounced and persists even when age, number of years of school completed, and measures of socioeconomic status are controlled.

As is well understood, many of the differences between black and white youth are a product of the difference in their cultural and socioeconomic backgrounds. Black youth are more likely than white to have farm backgrounds and are much more likely than white to come from "broken" homes. In terms of family income, occupation and education of parents, or any other measure of socioeconomic status, blacks fall far below whites. Controlling for factors of this kind, as well as we are able to with our data, generally reduces the differences between blacks and whites, but does not eliminate them entirely.

Despite the substantial inter-color differences in most aspects of labor market status and experience, there is surprisingly little difference between black and white high school students with respect to their educational or occupational goals. It is interesting to speculate whether the near equality in occupational goals of the two color groups is a phenomenon of long standing or whether it is an indication of rising aspirations of blacks occasioned by the recent increased emphasis upon civil rights legislation and equality of opportunity.[2] In either case, the facts are both sad and dangerous; the substantial disparity between the aspirations of the blacks and what realistically can be expected to be achieved, even on the most optimistic assumtions, creates the basis for large scale disappointment, disenchantment, frustration, and perhaps outrage.

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[2] Cf. Meyer Weinberg, Desegregation Research: An Appraisal (Bloomington: Phi Delta Kappa Commission on Education, Human Rights, and Responsibilities, 1968), pp. 65-66.

Age

As has been implied earlier, many of the dependent variables that have been studied are strongly correlated with age. For example, among students and nonstudents alike, labor force participation is directly related to age, although the relationship is distorted in the case of students by the effect of educational level, since college youth are less likely to be in the labor force than high school youth. Unemployment drops precipitously with increasing age from 13 percent of the 16-17 year olds to 1.6 percent of the 22-24 year olds. A good deal of this difference, of course, reflects the influence of school enrollment status and educational attainment on the unemployment rate. Nevertheless, within both the student and nonstudent groups there is a pronounced relationship between age and unemployment rate. Students in their teens have rates in excess of 10 percent; those in their twenties, below 5 percent. Among those not enrolled, the teenage rate is over 5 percent, but the rate is under 2 percent for those in their twenties. An important effort in the longitudinal analysis will be to search for the additional factors that convert unemployment-prone teenagers into rather regularly employed young men in their twenties.

Among employed youth, there are age differences in the kinds of jobs held, the number of hours per week worked, and the methods used in finding jobs. Because of the close relationship between age and number of years of schooling among both students and those not enrolled in school, it is not possible to be certain in many cases about how much this relationship with age reflects the greater maturity and experience of older youth and how much it reflects their greater educational achievement. Nevertheless, it is clear that, among both students and nonstudents, youth in their twenties are much more likely than those in their teens to be in white-collar employment, and especially in professional and technical work. On the other hand, the younger group is much more likely to be employed as farm and nonfarm laborers than the older. Also, irrespective of school enrollment status, youth in their twenties are considerably more likely than those in their teens to work full time (35 or more hours per week). Indeed, in this case, a positive relationship between age and number of hours worked is regular and continuous even within the teenage group and the group 20-24 years of age. With respect to methods of job-finding, teenagers are more likely than youth in their twenties to rely on friends and relatives, and are slightly less likely to rely on such formal methods as private or public employment agencies.

The amount of occupational information that young men have is directly related to their age. In this case, there is reasonably good evidence that the influence of age is independent of educational attainment. High school graduates, for example, appear to increase their knowledge about occupations simply as the result of additional years of life and exposure to the labor market.

Even within the relatively narrow age limits of 14 to 17, age makes a fairly clear difference in the educational and occupational aspirations of young men. The proportion of youngsters undecided about what they would like to be doing at age 30 decreases substantially between the freshman and senior years of high school. As for educational aspirations, the proportions of those in school who hope to enter college are not much different as between the 14-15 and the 16-17 year old youth. However, because of the effect of high school dropouts, when one considers the entire age cohort, the proportion hoping to enter college is substantially less for the 16-17 year olds than it is for the 14-15 year olds. One of the important aspects of the longitudinal study will be to attempt to ascertain the causes of the changes in aspirations between the early and the late teens.

Education and Training

It is hardly surprising that the number of school years completed has a very substantial effect upon many aspects of the youth's labor market experience. Indeed, as has been seen, much of the influence that has been attributed to age is doubtless a reflection of educational attainment. Young men with some college training are much more likely to be professional and technical workers than are those without such education, and college-trained youth are clearly a larger proportion of the older than of the younger age groups. Education has a profound effect upon knowledge of the labor market. There is a consistent and regular increase in the proportion of youth scoring high on our occupational information test as number of years of school completed increases. Even within major occupation categories, there is a strong association between educational attainment and rate of pay. For example, among white youth between the ages of 20-24 who are employed as operatives and as craftsmen, the differential in hourly rate of pay between those with high school diplomas and those without is slightly in excess of 10 percent, and in the case of black youth the differential is substantially larger.

Young men with vocational training outside of regular school tend to have greater knowledge of the world of work than those who have not, and they also enjoy a pay differential over those without training. Because there is a correlation between training outside of regular school and number of years of regular school completed, we cannot be certain to what extent these relationships reflect an independent influence of training and to what extent they simply reflect the influence of education that has already been examined.

Socioeconomic Status

The educational and labor market experiences of a youth are determined to a striking degree by the socioeconomic status of his family. Whether one looks at current enrollment ratios, at knowledge of the world of work, or at aspirations, the influence of family background is profound. This already has been emphasized in our discussion of the differences between black and white youth, but it is no less important an influence within each of the color groups. There is sometimes a tendency to overlook the fact that, whereas blacks have larger proportions in the lower socioeconomic status categories, there are far more whites in these lower levels than there are blacks. Consider just one of our measures and its relationship to the enrollment rates of young men 16-24 years of age. In response to the question whether the family, when the youth was 14 years of age, had a library card and regularly received newspapers and magazines, about two million of the total age cohort (16-24) admitted lacking at least two of these three forms of reading materials. Of this total, approximately 1.4 million were white youth and 0.6 million black. The current school enrollment ratios for these culturally deprived young men are 23 percent for the whites and 32 percent for the blacks, compared to overall ratios for the total age cohort of 51 percent for the whites and 39 percent for the blacks. Thus, the relative disadvantage represented by this measure is apparently more severe for the whites than it is for the blacks.

The widespread deficiencies in the cultural background of youth indicated by this measure suggest the necessity for remedial programs in the schools. And, given the profound disparities that prevail in the quality of home life, equal opportunity for youth of different socioeconomic levels can be approached only if there are compensatory inequalities in educational investments. In other words, it is not sufficient that educational programs for youth in deprived neighborhoods become as good as those enjoyed by middle class youth; if they are to compensate for the cultural handicaps of their students, they clearly will require larger expenditures per pupil than those that prevail in schools for middle class youth. Moreover, there is evidence in other studies that special educational programs for culturally deprived youngsters must begin, as Project Headstart does, long before the youth arrive in high school.[3]

II SOME INTER-GENERATIONAL COMPARISONS

There are interesting similarities and contrasts between the young men under consideration here and men in their forties and fifties on whom we have reported earlier.[4] Labor force participation rates, of course, are drastically lower for young men 14 to 24 years of age than for men 45 to 59 because of the sizeable group of full-time students among the youth. However, when only out-of-school youth are examined, young men's labor force rates are nearly two percentage points higher than those of older men (95.6 vs. 93.8). Whites in both age groups have higher participation rates than blacks, but the inter-color difference is smaller among youth.

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[3] Project TALENT, Cognitive Growth During High School (Palo Alto, California: American Institute for Research, April, 1967), Bulletin No. 6.

[4] Parnes, et al., op. cit.

Among both age cohorts, married men are more likely to be in the labor force than those not married. Age variation, of course, has opposite effects within the two cohorts: labor force participation rates vary directly with age for the youth, but inversely with age for the older group of men. While education increases labor force participation among older men, it has no consistent effect for youth.

Young men 14-24 years old have drastically higher unemployment rates than men in their late forties and fifties. The rate for the young men not enrolled in school is 2.5 times the unemployment rate of older men, and the color differential is about the same for both groups: the unemployment rate for blacks is over three-fourths greater than for whites in both age cohorts. Among both the youth and the older men, low unemployment is associated with being married, with high educational attainment, and with having had some vocational training.

There are dramatic differences between the two age cohorts in two factors that have strong influences on labor market experience: health and educational attainment. The young men are far less likely than the older group to report a health problem or a physical condition that limits the amount or kind of work they can do: about a seventh of the youth compared with over a fourth of the older cohort. Although the educational attainment of the entire youth cohort will continue to increase as those now enrolled in school and college complete their studies, even the group that has already left school has substantially higher educational achievements than older men. Among out-of-school youth, only one-eighth of the whites and less than one-fourth of the blacks have had no high school, while the proportions are more than a third of the older white and two-thirds of the older black men. Two-thirds of the out-of-school white youth and more than two-fifths of the black have completed high school compared to only two-fifths of the older white men and one-sixth of the black. On the other hand, there is very little difference in the extent to which the two age groups have participated in training programs outside of regular school. Among youth not enrolled in school, nearly half of the whites and a fourth of blacks have had such training. Despite the much greater potential for training among the older men, the proportions are only slightly larger for them than for the youth.

Young men's hourly rates of pay are substantially lower than those of older men: mean rates are $2.48 for out-of-school youth 20-24 years of age and $3.39 for men 45-59. But the influence of age on rates of pay is vastly greater for whites than for blacks: older white men have mean rates of pay more than a third higher than white youth, but black men 45-59 have pay rates only a fifth more than those of 20-24 year olds. Thus the inter-color differential in average hourly compensation increases from 41 percent in the case of the youth to 58 percent in the case of the older men. This is dramatic evidence that blacks in the older cohort have a relative disadvantage far greater than that of youth.

Young men who are not enrolled in school have a substantially different occupational distribution from the older men. The latter are half again as likely as the former to be in white-collar jobs (36 percent versus 24 percent) and four times as likely to be managers and proprietors. Blue-collar work accounts for nearly two-thirds of out-of-school youth, but for less than half of the older men. But there is far less difference between the two age groups of black men than between the older and younger white men. For example, the proportions of blacks in white-collar employment are 11 percent for the youth and only 14 percent for men in their forties and fifties. This set of data could mean that inter-color differences in occupational opportunities have become less pronounced over time. This interpretation, however, is inconsistent with data comparing the first jobs of the older cohort with the current jobs held by the younger cohort. Except for differences associated with the substantial decline in the importance of agriculture between the two generations, the difference in occupational pattern between blacks and whites at the beginning of their careers now is not much less substantial than it was a generation ago.[4] Rather, the evidence suggests that the relative disadvantage of blacks, as compared with whites, becomes greater as an age cohort matures. This is consistent with the evidence in our study of the older males, which showed greater differences between blacks and whites in their current occupational distribution than in that which prevailed at the beginning of their careers.

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[4] The following table compares the occupational distribution of first job after leaving school for the 45-59 year old group and the current job of out-of-school youth 14-24 years of age.

Major occupation group	First job after leaving school: men 45-59 years of age with work experience		Current job: employed males 14-24 years of age not enrolled in school	
	WHITES	BLACKS	WHITES	BLACKS
White collar	27	8	26	11
Professional and technical	8	3	9	3
Nonfarm managers and proprietors	2	1	4	1
Clerical	10	2	9	7
Sales	6	2	4	0
Blue collar	46	43	63	65
Craftsmen and foremen	8	4	22	12
Operatives	25	20	32	34
Nonfarm laborers	13	18	9	19
Service	4	11	5	13
Farmers and farm laborers	23	37	5	10
Total percent	100	100	100	100
Total number (thousands)	13,608	1,400	5,024	852

Over 90 percent of employed young men have positive attitudes toward their jobs, a figure only slightly less than the proportion for men aged 45-59. A high degree of job satisfaction, however, is clearly less common for youth than for older men. Among out-of-school youth 16-24 years of age, half the whites and over one-third of the blacks like their jobs very much, but this is true for nearly three-fifths of the older whites and half the older blacks. When occupation is controlled, these color differences in job satisfaction persist among young men but disappear among the older men.

The younger men are much less strongly attached to their present jobs than the older men, at least as judged by their responses to hypothetical job offers. Only a seventh of employed youth 16-24 years old would refuse to change jobs in the local area at any wage rate, while this is true of two-fifths of the older men. Young men also are more willing than those in the older age cohort to make a geographic job change. In all cases blacks register lower attachment than whites.

In talking about things they particularly like about their jobs, a majority of youth (nearly three-fifths) allude to intrinsic aspects of the work. Nevertheless, this is a somewhat smaller proportion than prevails among the older age cohort (two-thirds). Moreover, there is much less difference in this respect between blacks and whites and among types of occupations in the case of the youth than in the case of the older age cohort. Among the latter, white men are more likely to focus on intrinsic job characteristics than black men, and the same is true of white-collar workers as compared with blue-collar workers.

III A FORWARD LOOK

At numerous points in the previous chapters we have referred to interesting questions for longitudinal analysis which we expect to pursue when the data from follow-up surveys become available. It seems fitting in concluding the volume to present a somewhat more systematic, though not necessarily exhaustive, preview of the kinds of analyses we propose to make and the major types of hypotheses we intend to test.

To begin with, collection of detailed work histories over a five-year period will permit us to test over a longer period of time some of the relationships reported here on the basis of data for one year. An advantage in doing so is that we would expect greater variation in some of the variables over the longer time period. For instance, a larger fraction of the out-of-school young men who are now 20-24 years of age will doubtless experience unemployment and periods of withdrawal from the labor force over a five-year than during a one-year period. This will increase the statistical reliability of our analysis of, say, the effect of unemployment on work attitudes, since the numerical base for our percentage distributions of those with some unemployment will be larger.

Second, in each annual survey we expect both to describe and to analyze changes in school enrollment status and in various aspects of labor market status. Merely quantifying the extent of gross movement into and out of the formal educational system, among different schools, into and out of employment, and among different kinds of jobs will be instructive in itself, since there is very little knowledge about the magnitude of these types of change. Of greater interest, however, will be the exploration of the "causes" and "consequences" of such changes. For example, in what respects do youth who leave school during the course of the year differ from those in the same year of school who continue? What are the relative influences of attitude toward school, economic factors, I.Q. score, and characteristics of the school? As another example, among young men whose formal education has ended, what are the factors that differentiate those who change jobs from those who do not? Are men who have expressed dissatisfaction with their jobs in the initial survey more likely to have left them than those who were satisfied? Are job changers more likely or less likely than nonchangers to feel an increased satisfaction in their work? Are they more or less likely to have improved their earnings? These are only illustrative of the kinds of questions to be asked. Our plan of analysis calls for ascertaining the correlates of most of the dimensions of labor mobility: movement into and out of the labor force, from unemployment to employment and vice versa, between occupations (with or without an accompanying change of employer), between employers (with or without an accompanying change of occupation), and between different labor market areas.

A closely related objective of the follow-up surveys will be to test the predictive value of some of our psychological measures. For example, to what extent does our measure of "attachment" to an employer discriminate between those who change jobs during the period of the study and those who do not? Is a given propensity to move more likely to result in job changes in "tight" labor market areas than in "loose" labor market areas, as our model would predict? To take another example, are those who score high on the occupational information test, other things being equal, more likely than those with lower scores to experience less unemployment and to enjoy upward mobility during the course of the study?

Fourth, we shall be particularly interested in the development of occupational goals over time. What proportion of young teenagers adhere steadfastly to a given goal and appear to be making progress toward it? What characteristics distinguish these youngsters from those who shift about? What are the relative influences of economic factors and of educational experiences in modifying career choices? When youngsters change their minds about the occupation they wish to pursue, are there systematic relationships between their original and their new goals?

Several important variables that were not on hand for the present report will be available for use in subsequent ones. Among the most important of these are the I.Q. score and the academic record of the respondents and several characteristics of the high school they attended.

These data will permit, among other things, a more refined measure of the effect of education on income than has hitherto been possible with national samples. In assessing the influence of years of school completed on earnings, we hope to be able to control for variations in intelligence and variations in the quality of education as well as for such factors as socioeconomic status of family and attitudinal characteristics.

Finally, we shall also be interested in evaluating the effects of certain environmental changes upon the educational and labor market experiences of the age group of youth under consideration. What will be possible along these lines will clearly depend on how much and what kinds of change occur in the environment over the five-year period. The effects of fluctuations in the level of economic activity on the volume and pattern of mobility may be examined. Should there be innovations in manpower policy, it may be possible to test the effects of these upon the age group under consideration. For example, one might inquire whether changes in coverage or the minimum wage level under the Fair Labor Standards Act have any perceptible effect on the employment experience of those occupational and industrial categories of youth whose wages are most likely to have been affected. Another interesting question, in view of the rather dramatic changes in the climate of race relations in the United States, is whether this is reflected in any way in the status or attitudes of the black youth in our sample.

By the end of the five years of study there will have been collected for this age group of men a larger body of data on educational and work experience and on attitudes relating to school and work than has ever been accumulated for a national sample. At the same time, equally voluminous records will have been collected for the same age group of young women, for women between the ages of 30 and 44, and for the men 45-59 years of age, to whom reference already has been made. There are almost limitless opportunities for analysis within and among these studies. Our hope is that such analysis will yield new insights into labor market processes and problems which will improve our understanding of labor markets and thereby provide a basis for improved private and public manpower policies.

APPENDICES

APPENDIX A

GLOSSARY

AGE

Age of respondent as of last birthday prior to April 1, 1966.

ATTACHMENT TO CURRENT JOB

Relative increase in rate of pay for which an employed respondent would be willing to accept a hypothetical offer of employment with a different employer.

CLASS OF WORKER

Wage and Salary Worker

A person working for a rate of pay per unit-time, commission, tips, payment in kind, or piece rates for a private employer or any government unit.

Self-employed Worker

A person working in his own unincorporated business, profession, or trade, or operating a farm for profit or fees.

Unpaid Family Worker

A person working without pay on a farm or in a business operated by a member of the household to whom he is related by blood or marriage.

COLOR

The term "black" refers to all those who are not Caucasian and is used in lieu of the more conventional "nonwhite." For further detail see Chapter 1, footnote 1.

EDUCATIONAL ASPIRATIONS

Total number of years of regular school that the respondent would like to achieve.

EDUCATIONAL ATTAINMENT: See HIGHEST YEAR OF SCHOOL COMPLETED

EDUCATIONAL EXPECTATIONS

Total number of years of regular school that the respondent feels he will actually achieve.

EMPLOYED: See LABOR FORCE AND EMPLOYMENT STATUS

EXPOSURE TO READING MATERIALS AT AGE 14

Whether or not the respondent's family, when he was 14 years old, had a library card and received newspapers and/or magazines in the home.

EXTRINSIC JOB FACTORS

Aspects of the job environment such as wages, hours, security, and supervision, which have no direct relation to the inherent nature of the work.

FAMILY INCOME

Income from all sources (including wages and salaries, net income from business or farm, pensions, dividends, interest, rent, royalties, social insurance, and public assistance) received by any family member living in the household. Income of nonrelatives living in the household is not included.

HEALTH, EFFECT ON ACTIVITY

Respondent's assessment of whether his physical or mental condition (1) limits his work activity; (2) limits other activity; or (3) for those enrolled in school, limits his school activity. If the answer to any of these questions is yes, the nature of the limitation is ascertained.

HIGH SCHOOL CURRICULUM

Orientation and goal of high school courses, usually related to future educational or occupational plans. Examples used are college preparatory, vocational, commercial, or general.

HIGHEST YEAR OF SCHOOL COMPLETED

The highest grade finished by the respondent in "regular" school, where years of school completed are denoted 9-11, 12, 13-15, etc.

HOURLY RATE OF PAY

Compensation--in dollars--for work performed. This is limited to wage and salary workers because it is virtually impossible to ascertain to what extent the earnings of the self-employed are wages as opposed to other kinds of returns. If a time unit other than an hour was reported, hourly rates were computed by first converting the reported figure into a weekly rate and then dividing by the number of hours usually worked per week.

HOURS WORKED DURING SURVEY WEEK

The total number of hours worked at all jobs held by the respondent during the calendar week preceding the date of interview.

INCOME OF RESPONDENT

Income from all sources (including wages and salaries, net income from business or farm, pensions, dividends, interest, rent, royalties, social insurance, and public assistance) received only by the respondent.

INDUSTRY

The 10 one-digit-level classes of the Bureau of the Census' functional classification of employers on the basis of nature of final product.

INTRINSIC JOB FACTORS

Aspects of the job which are inherent in the nature of the occupation or relate to job content.

JOB

A continuous period of service with a given employer.

Current or Last Job

For those respondents who were employed during the survey week: the job held during the survey week. For those respondents who were either unemployed or out of the labor force: the most recent job.

First Job

The respondent's initial job of at least one month's duration after permanently leaving school.

KNOWLEDGE OF THE WORLD OF WORK: See OCCUPATIONAL INFORMATION TEST

LABOR FORCE AND EMPLOYMENT STATUS

In the Labor Force

All respondents who were either employed or unemployed during the survey week:

Employed

All respondents who during the survey week were either (1) "at work"--those who did any work for pay or profit or worked without pay for 15 hours or more on a family farm or business; or (2) "with a job but not at work"--those who did not work and were not looking for work, but had a job or business from which they were temporarily absent because of vacation, illness, industrial dispute, bad weather, or because they were taking time off for various other reasons.

Unemployed

All respondents who did not work at all during the survey week and had either looked or were looking for a job in the four-week period prior to the survey, all respondents who did not work at all during the survey week and were waiting to be recalled to a job from which they were laid-off, and all respondents who did not work at all during the survey week and were waiting to report to a new job within 30 days.

Out of the Labor Force

All respondents who were neither employed nor unemployed during the survey week.

LABOR FORCE PARTICIPATION RATE

The proportion of the total population or of a demographic subgroup of the population classified as "in the labor force."

LENGTH OF SERVICE IN CURRENT (LAST) JOB

The total number of years spent by the respondent in his current (most recent) job.

MARITAL STATUS

Respondents were classified into the following categories: married, spouse present; married, spouse absent; divorced; widowed; separated; and never married. "Separated" includes all respondents who answered that they are separated to the marital status question.

NATIONALITY

Classification is on the basis of "national origin" of respondent, his parents, or grandparents as follows: if all were born in the United States, the respondent is classified as "American." Otherwise, respondent is assigned the nationality of the first of the following born outside the U.S.: (1) respondent, (2) father, (3) mother, (4) paternal grandfather, (5) paternal grandmother, (6) maternal grandfather, and (7) maternal grandmother.

NONSTUDENT

All respondents not enrolled in regular school at the time of the survey.

OCCUPATION

The ten occupation groups are the ten one-digit classes used by the Bureau of the Census in the 1960 Census. The four types of occupation are white collar (professional and technical workers; managers, officials, and proprietors; clerical workers; and sales workers), blue collar (craftsmen and foreman, operatives, and nonfarm laborers), service, and farm (farmers, farm managers, and farm laborers).

OCCUPATION DESIRED AT AGE 30

The occupation which the respondent would like to hold when he is 30 years old.

OCCUPATIONAL INFORMATION TEST

A series of questions designed to measure the extent of the respondent's information about the labor market. First, the respondent is asked to match the job title with several job descriptions. Second, he is asked to indicate the amount of regular schooling needed for specific occupations; and, third, he chooses from a pair of occupations the one in which average annual earnings is higher. For scoring procedure, see Chapter 5, pages 120-121n.

OUT OF THE LABOR FORCE: See LABOR FORCE AND EMPLOYMENT STATUS

PSU (PRIMARY SAMPLING UNIT)

One of the 235 areas of the country from which the sample for this study was drawn; usually an SMSA (standard metropolitan statistical area) or a county.

REACTION TO HYPOTHETICAL JOB OFFER: See ATTACHMENT TO CURRENT JOB

REGULAR SCHOOL

"Regular" schools include graded public, private, and parochial elementary and high schools; colleges; universities; and professional schools.

RESIDENCE IN COUNTY OR SMSA, LENGTH OF

The length of time--in years--the respondent has lived in county or SMSA of present residence.

RESIDENCE AT AGE 14

Degree of urbanization of area in which respondent lived when he was 14 years old. These areas are defined as rural farm, rural nonfarm, town, suburb of city, city (25,000-100,000), and city (100,000 or more).

SATISFACTION WITH JOB, DEGREE OF

Respondent's report of his feelings toward his job when confronted with the following four alternatives: "like it very much, like it fairly well, dislike it somewhat, dislike it very much."

SCHOOL ENROLLMENT STATUS

An indication of whether or not the respondent is presently enrolled in regular school.

SELF-EMPLOYED: See LABOR FORCE AND EMPLOYMENT STATUS

SPELL OF UNEMPLOYMENT

A continuous period of at least one week's duration during which the respondent was unemployed. A spell may be terminated either by employment or by withdrawal from the labor force.

SURVEY WEEK

For convenience, the term "survey week" is used to denote the calendar week preceding the date of interview. In the conventional parlance of the Bureau of the Census, it means the "reference week."

TENURE: See LENGTH OF SERVICE IN CURRENT (LAST) JOB

UNEMPLOYED: See LABOR FORCE AND EMPLOYMENT STATUS

UNEMPLOYMENT EXPERIENCE IN PREVIOUS 12 MONTHS

Cumulative number of weeks in the previous 12 months that the respondent reported he was looking for work or on lay-off from a job.

UNEMPLOYMENT RATE

The proportion of the labor force classified as unemployed.

UNPAID FAMILY WORKER: See CLASS OF WORKER

VETERAN STATUS

Whether the respondent served in any branch of the armed forces prior to the time of the survey.

VOCATIONAL TRAINING OUTSIDE SCHOOL

Program(s) taken outside the regular school system for other than social or recreational purposes. Sponsoring agents include government, unions, and business enterprises. A training course sponsored by a company must last at least six weeks to be considered a "program."

WAGE AND SALARY WORKERS: See CLASS OF WORKER

WAGE RATE: See HOURLY RATE OF PAY

WEEKS IN THE LABOR FORCE IN PREVIOUS 12 MONTHS

Cumulative number of weeks in previous 12 months that the respondent reported that he either worked, looked for work, or was on lay-off from a job.

WORK EXPERIENCE

Any full- or part-time employment experienced by the respondent any time during his life.

WORK MOTIVATION

Respondent's answer to "what would you say is more important to you in deciding what kind of work you would like to go into, good wages or liking the work?"

APPENDIX B*

SAMPLING, INTERVIEWING, AND ESTIMATING PROCEDURES

The Survey of Work Experience of Men 14-24 Years of Age is one of four longitudinal surveys sponsored by the Manpower Administration of the U. S. Department of Labor. Taken together these surveys constitute the National Longitudinal Surveys.

The Sample Design

The National Longitudinal Surveys are based on a multi-stage probability sample located in 235 sample areas comprising 485 counties and independent cities representing every state and the District of Columbia. The 235 sample areas were selected by grouping all of the nation's counties and independent cities into about 1,900 primary sampling units (PSU's) and further forming 235 strata of one or more PSU's that are relatively homogeneous according to socioeconomic characteristics. Within each of the strata a single PSU was selected to represent the stratum. Within each PSU a probability sample of housing units was selected to represent the civilian noninstitutional population.

Since one of the survey requirements was to provide separate reliable statistics for nonwhites, households in predominantly nonwhite enumeration districts (ED's) were selected at a rate three times that for households in predominantly white ED's. The sample was designed to provide approximately 5,000 interviews for each of the four surveys--about 1,500 nonwhites and 3,500 whites. When this requirement was examined in light of the expected number of persons in each age-sex-color group it was found that approximately 42,000 households would be required in order to find the requisite number of nonwhites in each age-sex group.

An initial sample of about 42,000 housing units was selected and a screening interview took place in March, and April, 1966. Of this number about 7,500 units were found to be vacant, occupied by persons whose usual residence was elsewhere, changed from residential use, or demolished. On the other hand, about 900 additional units were found which had been created within existing living space or had been changed from what was previously nonresidential space. Thus 35,360 housing units were available for interview; of these, usable information was collected for 34,662 households, a completion rate of 98.0 percent.

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* This appendix was written by George E. Hall, Demographic Surveys Division, and Anthony Turner, Statistical Methods Division, U. S. Bureau of the Census.

The original plan called for using this initial screening to select the sample for all sample groups. On reflection it was decided to rescreen the sample in the fall of 1966 prior to the first interview of males 14-24. Males in the upper part of that age group are the most mobile group in the entire population and a seven-month delay between the initial screening and the first interview seemed to invite problems.

To increase efficiency, it was decided to stratify the sample for the rescreening by the presence or absence of a 14 to 24 year old male in the household. The probability is great that a household which contained a 14 to 24 year old in March will also have one in September. However, we had to insure that the sample also represented persons who had moved into sample households in the intervening period, so that a sample of addresses which had no 14 to 24 year old males was also included in the screening operation.

This phase of the screening began in early September, 1966. Since a telephone number had been recorded for most households at the time of the initial interview, every attempt was made to complete the short screening interview by telephone.

Following this screening operation, 5,713 males age 14-24 were designated to be interviewed for the Survey of Work Experience. These were sampled differentially within four strata: whites in white ED's (i.e., ED's which contained predominantly white households), nonwhites in white ED's, whites in nonwhite ED's, and nonwhites in nonwhite ED's.

The Field Work

Three hundred twenty-eight interviewers were assigned to this survey. The primary requirement for interviewers was previous experience with the Current Population Survey (CPS).

A two-stage training program was used to provide specific instruction for this survey. First, two supervisors from each of the Bureau's 12 regional offices were trained in Washington; they in turn trained the interviewers and office clerks assigned to the survey in their regions. Each trainee was provided with a "verbatim" training guide prepared by the Bureau staff and reviewed by the Manpower Administration and the Center for Human Resource Research of The Ohio State University. The guide included not only lecture material, but a number of structured practice interviews to thoroughly familiarize the interviewers with the questionnaire. In addition to the classroom training, each interviewer was required to complete at least one live interview prior to beginning her assignment. Each of the regional supervisors was observed during at least one training session by professional members of the participating organizations. Each interviewer was observed during the early part of her assignment. This observation served the dual function of familiarizing the professional staff of the Census Bureau and of the Center for Human Resource Research with the actual field situation and of providing an opportunity for on-the-job training of the interviewer.

In addition to training, a field edit was instituted to insure adequate quality. This consisted of a "full edit" of the first five questionnaires returned by each interviewer, and a partial edit of the remaining questionnaires from each interviewer's assignment. The full edit consisted of reviewing the questionnaires from beginning to end, to determine if the entries were complete and consistent and whether the skip instructions were being followed. This edit was designed to determine if the interviewer understood her job. The interviewer was contacted by phone concerning minor problems, and depending on the nature of the problem, was either merely told of her error or asked to contact the respondent for further information or for clarification. For more serious problems the interviewer was retrained either totally or in part, and the questionnaire was returned for completion.

If problems arose, the complete edit was continued until the supervisor was satisfied that the interviewer was doing a complete and consistent job. The partial edit simply checked to determine that the interviewer had not inadvertently skipped any part of the questionnaire which should have been filled. Any questionnaire which failed the partial edit was returned to the interviewer for completion.

The training of interviewers began on October 24, 1966, and the interviewing immediately after. The interviewing continued until December, 1966. This is longer than the period permitted for the usual Census survey. However, a number of factors were responsible for the elapsed time. First, the questionnaire required approximately 45 minutes to an hour to complete. This interview time, coupled with the limited periods during the day when men in this age group are available, resulted in an average completion rate of just under two per day, during even the early stages of the interviewing. This average rate was reduced later as the more accessible cases were completed. The requirement that the interviewers be experienced in the CPS also caused some delay. For about one week each month the interviewers were not able to work on this survey because of the conflicting demands of the CPS. Finally, extra time was allowed to reduce the number of noninterviews resulting from persons who were temporarily absent from their homes or were otherwise temporarily not available for interview.

Of the 5,713 males 14 to 24 selected for the sample, usable questionnaires were obtained from 5,030 cases for a completion rate of 91.7 percent. The 479 noninterview cases are distributed in the following table.

Reasons for Noninterviews in
Survey of Work Experience of Males 14-24

Totals	Total	Refused	No one home--repeated visits	Moved or left house--could not locate	Temporarily absent	Other
Number of noninterviews	479	120	33	171	32	123
Percent of work-load	8.3	2.1	0.6	2.9	0.6	2.1
Percent of all noninterviews	100.0	25.0	6.7	35.7	6.7	25.9

Estimating Methods

The estimation procedure adopted for this survey was a multi-stage ratio estimate. The first step was the assignment to each sample case of a basic weight which was equal to the reciprocal of the sampling fraction of the stratum from which it was selected. Thus, for the Survey of Work Experience of Males 14-24 there were four different base weights reflecting differential sampling by color within stratum (i.e., white ED's versus nonwhite ED's).

1. Noninterview Adjustment

The weights for all interviewed persons were adjusted to the extent needed to account for persons for whom no information was obtained because of absence, refusal, or unavailability for other reasons. This adjustment was made separately for each of sixteen groupings: Census region of residence (Northeast, North Central, South, West), place of residence (urban, rural), and color (white, nonwhite).

2. Ratio Estimates

The distribution of the population selected for the sample may differ somewhat, by chance, from that of the nation as a whole, in such characteristics as age, color, sex, and residence. Since these population characteristics are closely correlated with the principal measurements made from the sample, the latter estimates can be substantially improved when weighted appropriately by the known distribution of these population characteristics. This was accomplished through the following two stages of ratio estimation.

a. First-Stage Ratio Estimation

This is a procedure in which the sample proportions were weighted by the known 1960 Census data on the color-residence distribution of the population. This step took into account the differences existing at the time of the 1960 Census between the color-residence distribution for the nation and for the sample areas.

b. Second-Stage Ratio Estimation

In this step, the sample proportions were weighted by independent current estimates of the population by age and color. These estimates were prepared by carrying forward the most recent Census data (1960) to take account of subsequent aging of the population, mortality, and migration between the United States and other countries. The adjustment was made by color within four age groupings: 14-15, 16-18, 19-21, 22-24.

After this step, each sample person has a weight which remains unchanged throughout the five-year life of the survey. The universe of study was thus fixed at the time of interview for the first cycle. No reweighting of the sample is made after subsequent cycles since the group of interviewed persons is an unbiased sample of the population group (in this case, males age 14-24) in existence at the time of the first cycle only.

Coding and Editing

Most of the questionnaire required no coding, the data being punched directly from precoded boxes. However, the various job description questions used the Bureau's standard occupation and industry codes that are used with the monthly CPS. Codes for the other "open end" questions were developed in conjunction with Ohio State from tallies of usually ten percent subsamples of the returns. A few of the questions required special handling. The attitudinal questions were especially difficult to handle. A sizeable number of these were set aside and were ultimately coded by the professional staff of Ohio State and the Bureau.

The consistency edits for the questionnaire were completed on the computer. For the parts of the questionnaire which were similar to the CPS a modified CPS edit was used. For all other sections separate consistency checks were performed.

None of the edits included an allocation routine which was dependent on averages or random information from outside sources, since such allocated data could not be expected to be consistent with data from subsequent surveys. However, where the answer to a question was obvious from others in the questionnaire, the missing answer was entered on the tape. For example, if item 52 ("If for some reason you were permanently to lose YOUR PRESENT JOB TOMORROW, what would you do?") was blank, but legitimate entries appeared in 53a, b, and c ("What kind of courses or training would you take?," "Where would you enroll for such schooling?," and "How would you finance this schooling?"), a "Return to school; get training" was inserted in 52. In this case, only if 52 was marked "Return to school," could 53a, b, and c be filled; therefore, the assumption was made that either the card punch operation failed to punch the item or the interviewer failed to mark it.

Further, some of the status codes which depend on the answers to a number of different items, were completed using only partial information. The most obvious example is the current employment status of the respondent. That is, whether he was employed, unemployed, or not in the labor force. This is determined by the answers to a number of related questions. However, if one or more of these questions is not completed but the majority are filled and consistent, the status is determined on the basis of the available responses. This gives rise to an artificially low count of "NA's" for certain items.

APPENDIX C

SAMPLING VARIATION

As in any survey based upon a sample, the data in this report are subject to sampling error, that is, variation attributable solely to the fact that they emerge from a sample rather than from a complete count of the population. Because the probabilities of a given individual's appearing in the sample are known, it is possible to estimate the sampling error, at least roughly. For example, it is possible to specify a "confidence interval" for each absolute figure or percentage, that is, the range within which the true value of the figure is likely to fall. For this purpose, the standard error of the statistic is generally used. One standard error on either side of a given statistic provides the range of values which has a two-thirds probability of including the true value. This probability increases to about 95 percent if a range of two standard errors is used.

Standard Errors of Percentages

In the case of percentages, the size of the standard error depends not only on the magnitude of the percentage, but also on the size of the base on which the percentage is computed. Thus, the standard error of 80 percent may be only 1 percentage point when the base is the total number of white men, but as much as 8 or 9 percentage points when the base is the total number of unemployed white men. Two tables of standard errors, one for whites and one for blacks, are shown below (Tables C-1 and C-2).

The method of ascertaining the appropriate standard error of a percentage[1] may be illustrated by the following example. There are about 5,000,000 white men in the age category 14 to 24. Our estimates indicate that 21 percent of these white men in our sample are married. Entering the table for white men (C-1) with the base of 14,046,000 and the percentage 20, one finds the standard error to be 0.9 percent. Thus chances are two out of three that a complete enumeration would have resulted in a figure between 20.1 and 21.9 percent (21 ± 0.9) and 19 out of 20 that the figure would have been between 19.2 and 22.8 percent (21 ± 1.8).

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[1] Because the sample is not random, the conventional formula for the standard error of a percentage cannot be used. The entries in the tables have been computed on the basis of a formula suggested by the Bureau of the Census statisticians. They should be interpreted as providing an indication of the order of magnitude of the standard error, rather than a precise standard error for any specific item.

Table C-1 Standard Errors of Estimated Percentages of Whites
(68 chances out of 100)

Base of percentage (thousands)	Estimated percentage				
	1 or 99	5 or 95	10 or 90	20 or 80	50
100	2.8	6.0	8.3	11.1	13.9
200	1.9	4.2	5.8	7.8	9.7
350	1.5	3.2	4.4	5.9	7.3
500	1.2	2.7	3.7	4.9	6.1
1,000	0.9	1.9	2.6	3.5	4.3
5,000	0.4	0.8	1.2	1.5	1.9
14,046	0.2	0.5	0.7	0.9	1.2

Table C-2 Standard Errors of Estimated Percentages of Blacks
(68 chances out of 100)

Base of percentage (thousands)	Estimated percentage				
	1 or 99	5 or 95	10 or 90	20 or 80	50
25	3.3	7.3	10.0	13.3	16.7
50	2.3	5.1	7.1	9.4	11.8
100	1.6	3.6	5.0	6.6	8.3
200	1.2	2.5	3.5	4.7	5.8
750	0.6	1.3	1.8	2.4	3.0
1,400	0.4	1.0	1.3	1.8	2.2
2,041	0.4	0.8	1.1	1.5	1.8

Standard Errors of Differences between Percentages

In analyzing and interpreting the data, interest will perhaps most frequently center on the question whether observed differences in percentages are "real," or whether they result simply from sampling variation. If, for example, one finds on the basis of the survey that 3.3 percent of the whites, as compared with 7 percent of the blacks, are unable to work, the question arises whether this difference actually prevails in the population or whether it might have been produced by sampling variation. The answer to this question, expressed in terms of probabilities, depends on the standard error of the difference between the two percentages, which, in turn, is related to their magnitudes as well as to the size of the base of each. Although a precise answer to the question would require extended calculation, it is possible to construct charts that will indicate roughly, for different ranges of bases and different magnitudes of the percentages themselves, whether a given difference may be considered to be"significant," i.e., is sufficiently large that there is less than a 5 percent chance that it would have been produced by sampling variation alone. Such charts are shown below.

The magnitude of the quotient produced by dividing the difference between any two percentages by the standard error of the difference determines whether that difference is significant. Since the standard error of the difference depends only on the size of the percentages and their bases, for differences centered around a given percentage it is possible to derive a function which relates significant differences to the size of the bases of the percentages. If a difference around the given percentage is specified, the function then identifies those bases which will produce a standard error small enough for the given difference to be significant. The graphs which follow show functions of this type; each curve identifies combinations of bases that will make a given difference around a given percentage significant. For all combinations of bases on or to the northeast of a given curve, the given difference is the maximum difference necessary for significance.

Thus, to determine whether the difference between two percentages is significant, first locate the appropriate graph by selecting the one labeled with the percentage closest to the midpoint between the two percentages in question. When this percentage is under 50, the base of the larger percentage should be read on the horizontal axis of the chart and the base of the smaller percentage on the vertical axis. When the midpoint between the two percentages is greater than 50, the two axes are to be reversed. (When the midpoint is exactly 50 percent, either axis may be used for either base.) The two coordinates identify a point on the graph. The relation between this point and the curves indicates the order of magnitude required for a difference between the two percentages to be statistically significant at the 5 percent confidence level.[2]

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[2] The point made in footnote 1 is equally relevant here. The graphs should be interpreted as providing only a rough (and probably conservative) estimate of the difference required for significance.

All this may be illustrated as follows. Suppose in the case of the whites the question is whether the difference between 27 percent (on a base of 6,000,000)[3] and 33 percent (on a base of 5,000,000) is significant. Since the percentages center on 30 percent, Figure 4 should be used. Entering the vertical axis of this graph with 6,000,000 and the horizontal axis with 5,000,000 provides a coordinate which lies to the northeast of the curve showing combinations of bases for which a difference of 5 percent is significant. Thus the 6 percentage point difference (between 27 and 33 percent) is significant.

As an example of testing for the significance of a difference between the two color groups, consider the following. The data in our study show that for young men in the age cohort 22-24, 96 percent of the blacks (on a base of 406,000) and 92 percent of the whites (on a base of 3,045,000) are in the labor force. To determine whether this inter-color difference is statistically significant, Figure 1 is used because the midpoint (94 percent) between the two percentages is closer to 95 than 90.[4] Entering this graph at 406,000 on the vertical axis for blacks (calibrated on the right hand side of the figure) and at 3,045,000 on the horizontal axis for whites provides a coordinate which lies to the northeast of the 4 percent curve. Thus, the 4 percentage point difference in labor force participation rate is significant.

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[3] Each of the curves in the graphs of this appendix illustrates a functional relationship between bases expressed in terms of actual sample cases. For convenience, however, the axes of the graphs are labeled in terms of blown up estimates which simply reflect numbers of sample cases multiplied by a weighting factor.

[4] If both percentages are less (greater) than 50 and the midpoint between the two percentages is less (greater) than the percentage for which the curves were constructed, the actual differences necessary for significance will be slightly less than those shown on the curve. The required differences shown on the curves understate the actual differences necessary for significance when both percentages are less (greater) than 50 and the midpoint is greater (less) than the percentage for which the curves were constructed.

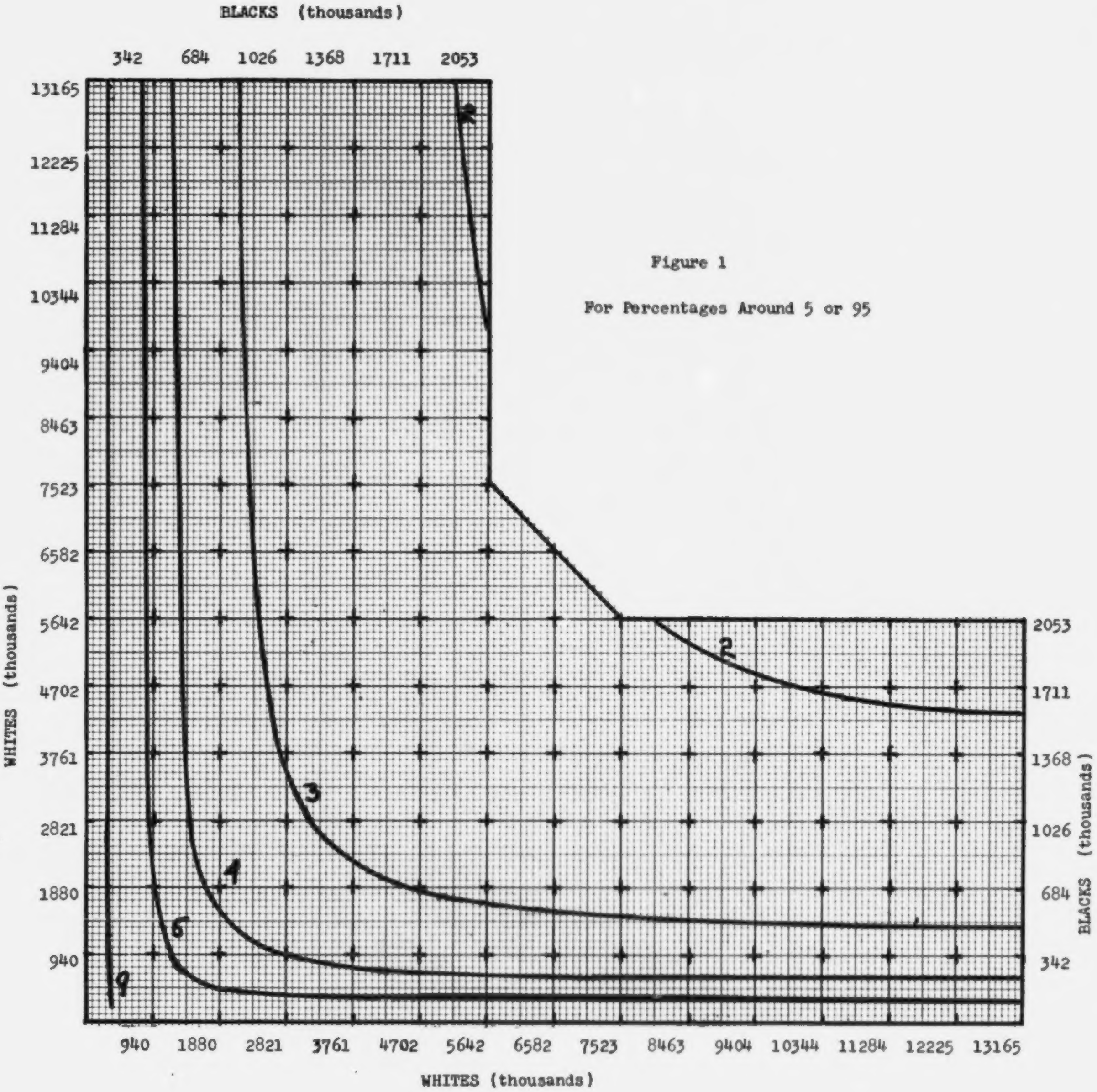

Figure 1

For Percentages Around 5 or 95

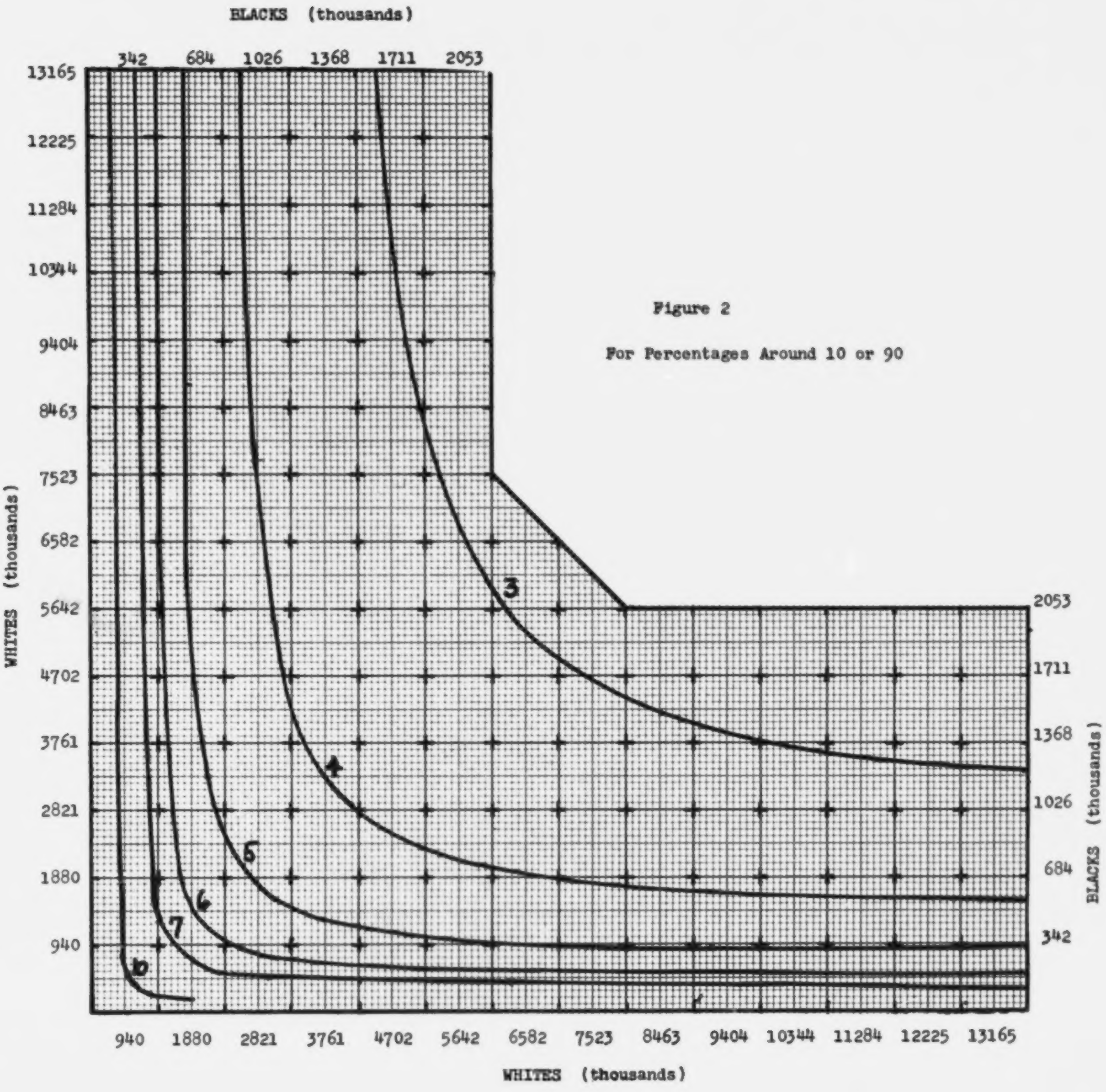

Figure 2

For Percentages Around 10 or 90

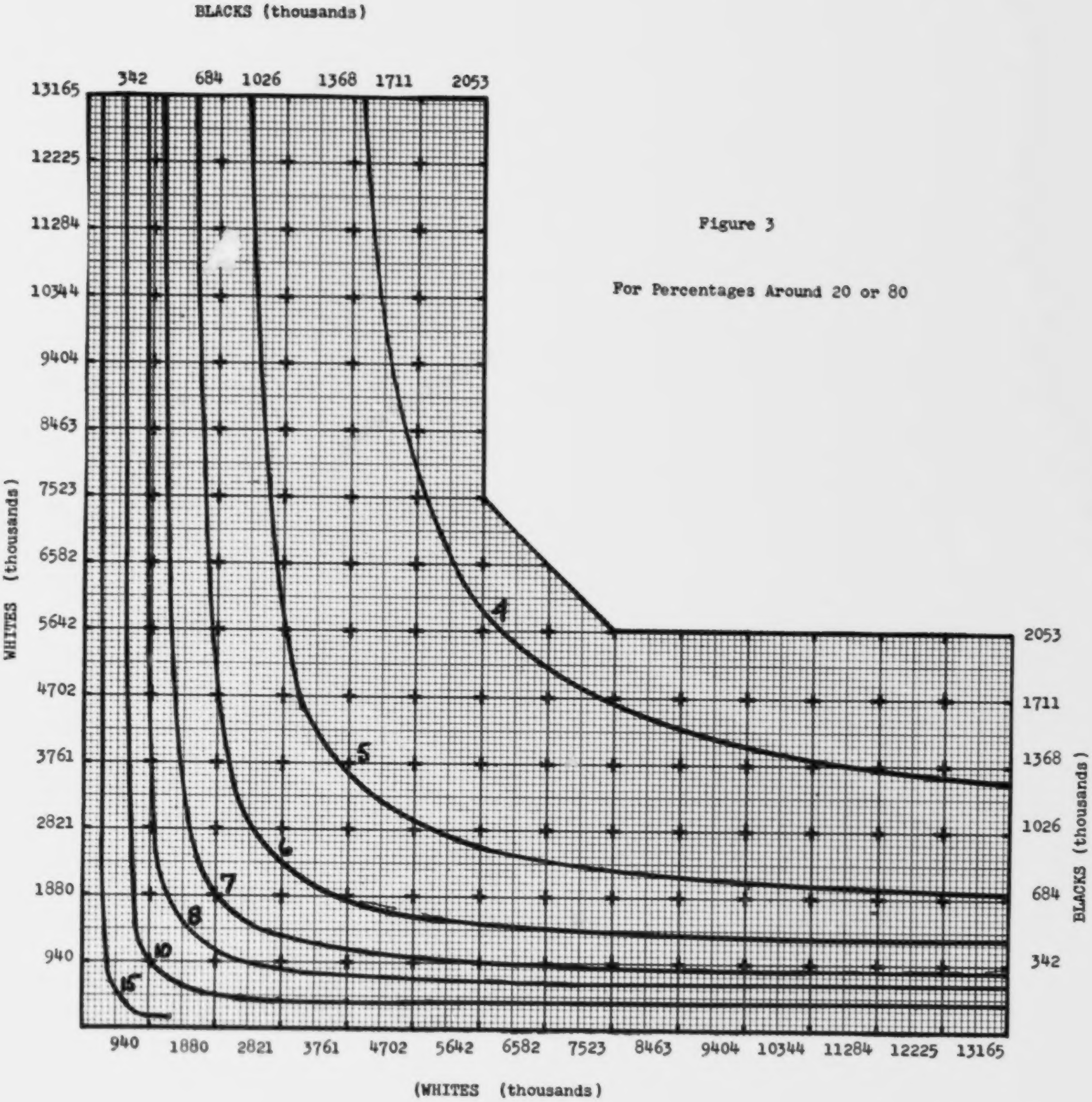

Figure 3

For Percentages Around 20 or 80

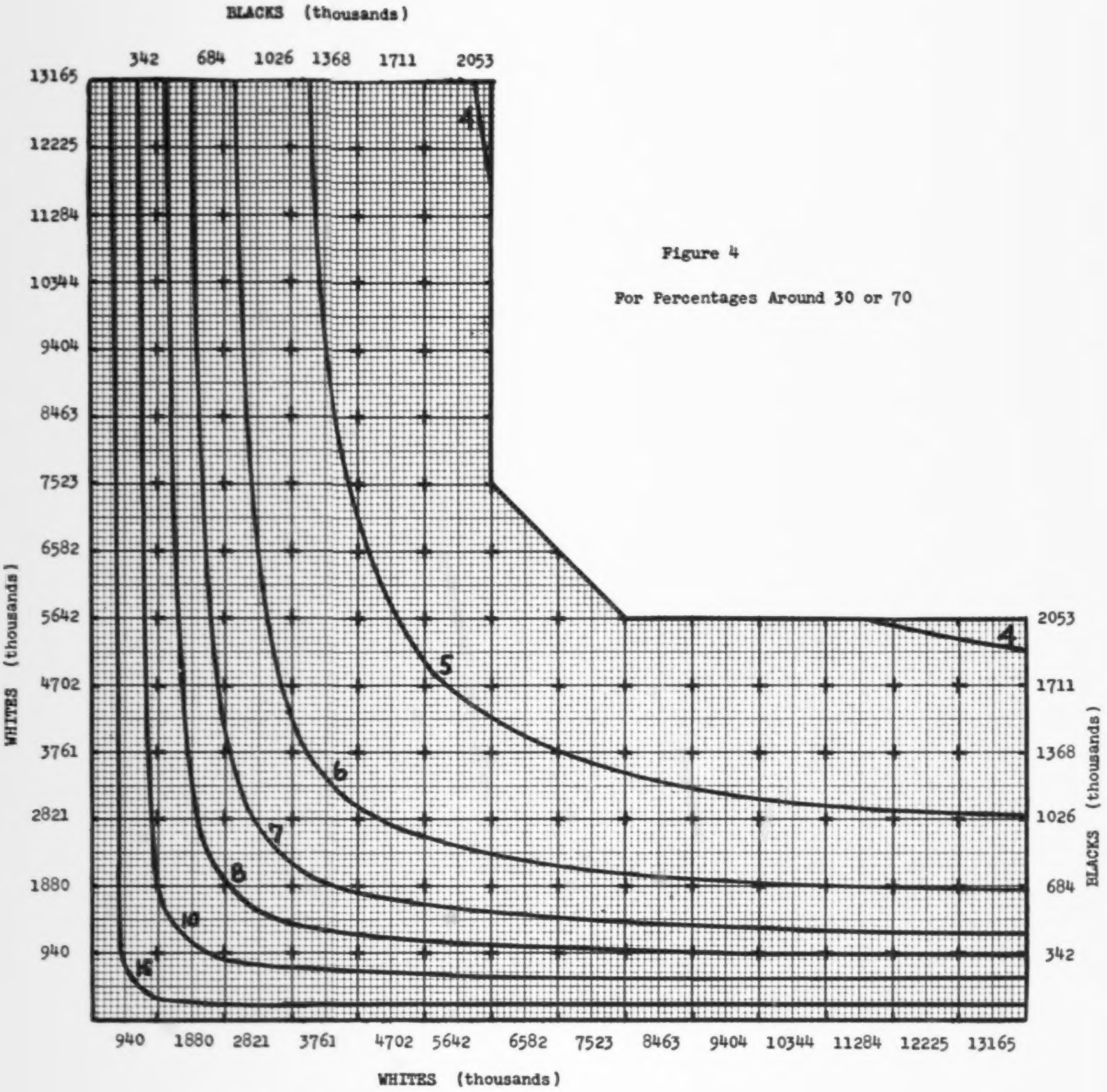

Figure 4

For Percentages Around 30 or 70

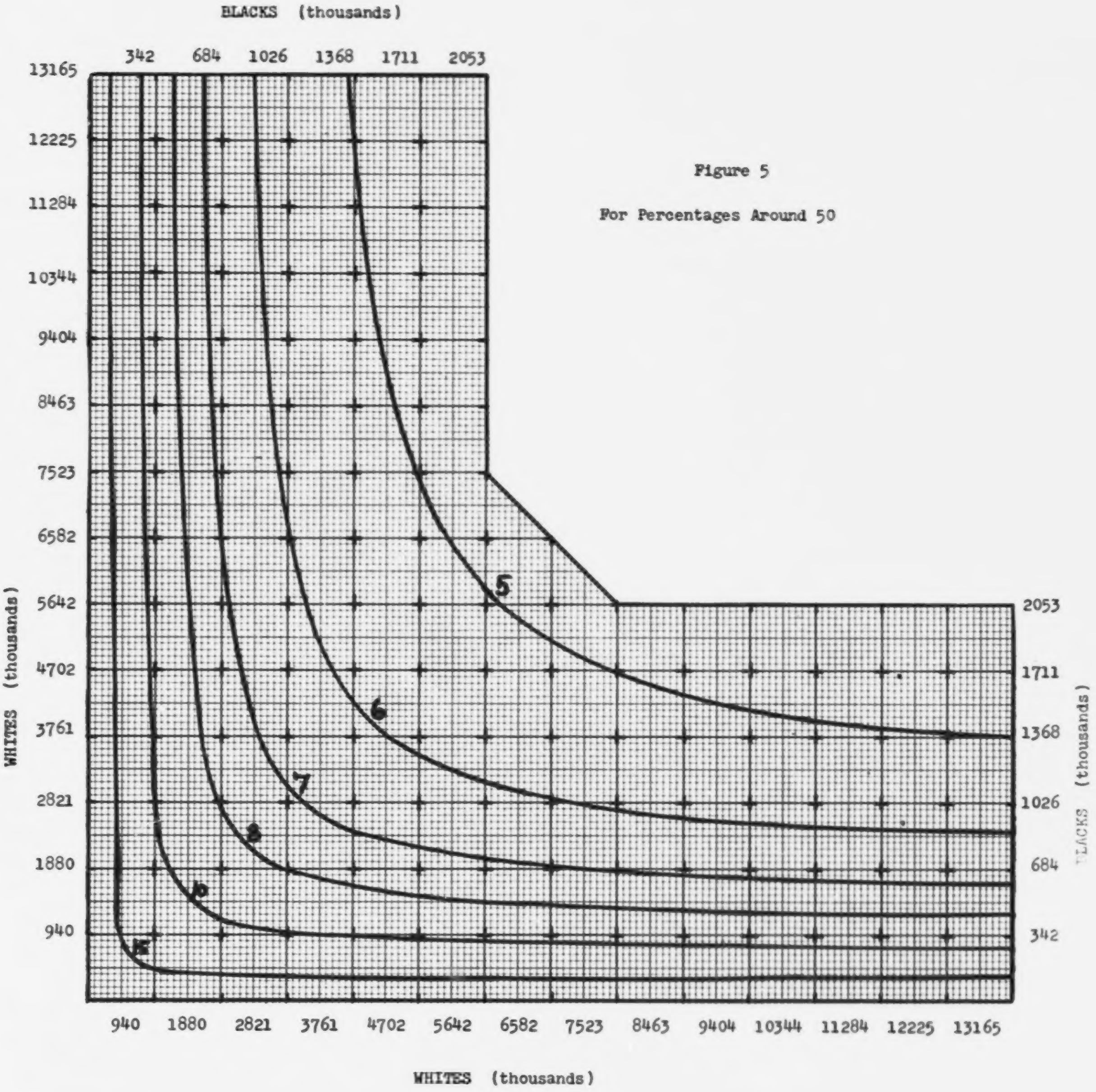

Figure 5

For Percentages Around 50

Appendix D

NONRESPONSE RATES

For most of the variables presented in this volume there were varying numbers of young men from whom information was not obtained, because either the response to the specific question was unclassifiable or no answer was given. Rarely (in the case of less than five variables) is the number of no responses larger than 10 percent of the relevant total. This appendix presents a table with the major variables used in the report (for both blacks and whites), the definition of the appropriate universe, the number of men in that universe, and the number and proportion of responses that were not ascertained.

Variable name	Item number on interview schedule	Definition of universe	WHITES			BLACKS		
			Universe number (thousands)	Not ascertained		Universe number (thousands)	Not ascertained	
				Total number (thousands)	Percent		Total number (thousands)	Percent
Attachment to current job:								
Reaction to hypothetical job offer inside area	50	All employed wage and salary workers not enrolled in school	4,777	636	13.3	838	109	13.0
Reaction to hypothetical job offer outside area	51	All employed wage and salary workers not enrolled in school	4,777	399	8.4	838	68	8.1
Attitude toward job:								
Factor liked best	49a	All employed respondents not enrolled in school	5,024	91	1.8	852	21	2.5
Factor liked least	49b	All employed respondents not enrolled in school	5,024	187	3.7	852	30	3.5
Satisfaction with job, degree of	48	All employed respondents not enrolled in school	5,024	50	1.0	852	12	1.4
Class of worker	42e	All respondents with work experience	12,657	39	0.3	1,770	3	0.2
Companies named as alternative sources of employment	56c	All employed respondents not enrolled in school who would look for work in event of a hypothetical job loss	3,575	79	2.2	720	18	2.5
Educational experience:								
Educational goals	34a,35	All respondents enrolled in school	8,644	142	1.6	1,078	15	1.4
Number of years of school completed	1,2,4	All respondents	14,046	0	0.0	2,041	0	0.0
School enrollment status	1,2,4	All respondents	14,046	0	0.0	2,041	0	0.0
Employment status of wife	118	All respondents with work experience	12,657	105	0.8	1,770	38	2.1
Exposure to reading material at age 14	101	All respondents	14,046	34	0.2	2,041	11	0.5

Variable name	Item number on interview schedule	Definition of universe	WHITES			BLACKS		
				Not ascertained			Not ascertained	
			Universe number (thousands)	Total number (thousands)	Percent	Universe number (thousands)	Total number (thousands)	Percent
Financial characteristics:								
Family income, total	88a	All respondents	14,046	1,618	11.5	2,041	188	9.2
Hourly rate of pay	42f	All respondents with work experience in wage or salary jobs	11,716	398	3.4	1,707	50	2.9
Income of respondent	87a-d	All respondents	14,046	1,114	7.9	2,041	184	9.0
Health, effect on activity	75-77	All respondents	14,046	95	0.7	2,041	9	0.4
High school experience:								
Curriculum	23e	All respondents with some high school experience	13,115	349	2.7	1,712	52	3.0
Favorite extracurricular activity	26g	All respondents enrolled in high school who have completed one year of high school, and who participate in an extracurricular activity	2,968	53	1.8	423	4	0.9
Hours per week spent on extracurricular activities	26f	All respondents enrolled in high school who have completed one year of high school	4,425	83	1.9	621	4	0.6
Hours per week spent on homework	26a	All respondents enrolled in high school who have completed one year of high school	4,425	53	1.2	621	5	0.8
Reaction to high school experience	28	All respondents enrolled in high school who have completed one year of high school	4,425	57	1.3	621	3	0.5
Subject disliked most	25a	All enrolled respondents who have completed one year of high school, but less than one year of college	5,392	73	1.4	706	7	1.0
Subject enjoyed most	24a	All respondents who have completed one year of high school, but less than one year of college	9,153	124	1.4	1,375	18	1.3
Hours worked during survey week	38b	All employed respondents at work during survey week	8,688	0	0.0	1,230	0	0.0

Variable name	Item number on interview schedule	Definition of universe	WHITES			BLACKS		
			Universe number (thousands)	Not ascertained		Universe number (thousands)	Not ascertained	
				Total number (thousands)	Percent		Total number (thousands)	Percent
Industry	42d	All respondents with work experience	12,657	53	0.4	1,770	10	0.6
Labor force status	37	All respondents	14,046	0	0.0	2,041	0	0.0
Length of service	43b	All respondents with work experience	12,657	775	6.1	1,770	74	4.2
Method of finding current job	43a	All employed respondents not enrolled in school	5,024	33	0.6	852	7	0.8
Method of looking for work in past four weeks	40b	All respondents unemployed, survey week	693	50	7.2	145	7	4.8
Nationality	96	All respondents	14,046	28	0.2	2,041	4	0.2
Nonschool activity engaged in most	27	All enrolled respondents who have completed one year of high school, but less than one year of college	5,392	252	4.7	706	53	7.5
Occupation	42c	All respondents with work experience	12,657	119	0.9	1,770	27	1.5
Occupational goals:								
Occupation desired at age 30	70	All respondents	14,046	593	4.2	2,041	62	3.0
Perceived chances of achieving occupation desired	72	All respondents not enrolled who desire an occupation at age 30 that is different from their current or last occupation	3,247	198	6.1	639	23	3.6
Reason perceived chances of achieving occupation desired is fair or poor	73	All respondents not enrolled who desire an occupation at age 30 that is different from their current or last occupation, but feel their chances to achieve it are fair or poor	1,231	236	19.2	268	33	12.3

Variable name	Item number on interview schedule	Definition of universe	WHITES			BLACKS		
			Universe number (thousands)	Not ascertained		Universe number (thousands)	Not ascertained	
				Total number (thousands)	Percent		Total number (thousands)	Percent
Occupation of head of household when youth was age 14	100	All respondents	14,046	915	6.5	2,041	260	12.7
Occupational information test	67,69	All respondents	14,046	0	0.0	2,041	0	0.0
Residence at age 14	98	All respondents	14,046	21	0.1	2,041	1	0.0
Responsibility change between current job and job one year ago	44h	All respondents employed in October, 1965, and October, 1966	6,719	181	2.7	917	15	1.6
Skill change between current job and job one year ago	44g	All respondents employed in October, 1965, and October, 1966	6,719	166	2.5	917	12	1.3
Spells of unemployment, number of	60	All respondents with work experience in 1965	12,316	693	5.6	1,735	98	5.6
Veteran status	17	All respondents	14,046	31	0.2	2,041	5	0.2
Vocational training outside school:								
Type of vocational training	13c,14b, 15c,16c, 21a	All respondents not enrolled and not college graduates who want training	4,217	46	1.1	842	6	0.7
Extent of vocational training	13d,14c, 15d,16d, 21c	All respondents not enrolled and not college graduates	5,038	16	0.3	935	2	0.2
Work motivation	68	All respondents	14,046	246	1.8	2,041	51	2.5

APPENDIX E*

COMPARISON OF DATA FROM LONGITUDINAL SURVEY AND CURRENT POPULATION SURVEY

As indicated in Chapter 3, the longitudinal survey (LGS) has produced estimates of employment and unemployment among male youth--especially those enrolled in school--that are considerably higher than those based upon data collected in the Current Population Survey (CPS). Also, the LGS measures a lower school enrollment ratio for the age group than does the CPS.

Since the CPS interview schedule for the month of October regularly includes supplementary questions on school attendance, it is possible to explore the pattern of differences between the two surveys for male students.[1] The Bureau of the Census is currently analyzing some of the unpublished CPS data in relation to the LGS data to see what light such comparisons shed on the sources of difference between the two surveys. In this appendix, we describe the possible sources of difference, and present in some detail a comparison of the two sets of data.

Comparison of the Two Surveys

Both the CPS and the LGS are based on national probability samples. Aside from sampling variation, there are several possible sources of difference in the labor force and employment estimates from the two surveys. First of all, the CPS generally gathers information about all members of a household from one of its adult members, most frequently the housewife. This means that for an unmarried youth living at home, CPS questions generally are answered by the youngster's mother. In the case of a young married man, the questions most likely would be answered by his wife, especially if she is not working. In the LGS, on the other hand, the data invariably are reported by the young man to whom they apply.

Second, there is an age difference between the two samples. For purposes of the CPS, inclusion within the cohort 14-24 years old was on the basis of attained age in October, 1966, whereas in the LGS, the criterion was attained age in April of that year. The LGS sample is thus older by half a year than the CPS sample, which might account, in part, for the higher labor force participation rates produced by the former survey.

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* This appendix was written by Herbert S. Parnes and Ronald M. Schmidt.

[1] See U.S. Department of Labor, Bureau of Labor Statistics, Special Labor Force Report No. 87, "Employment of School Age Youth, October 1966."

Third, the questions on labor force and employment status and on school enrollment were not identical in the two surveys. For ascertaining labor force and employment status, our longitudinal survey used questions that were ultimately to be incorporated in the CPS. The CPS schedule was not modified until January, 1967. In other words, the questions relating to current labor force and employment status on our LGS schedule were identical to those which now appear in CPS.[2] With respect to school enrollment, respondents in the LGS were asked, "Are you attending or enrolled in regular school?" The CPS question, on the other hand, omits the word "regular," even though both studies intend to include only schooling which advances a person toward an elementary or a high school diploma, or a college, university, or professional school degree. Also, CPS instructions to interviewers, unlike those of LGS, call for classifying students as persons who have been enrolled during the school year, even if they no longer are enrolled at the time of the interview. Moreover, in the CPS, questions on labor force and employment status appear first in the interview schedule, followed by those on school enrollment status. In the LGS, the order of these two segments of the schedule is reversed.

Fourth, there is a difference in timing between the two surveys. Interviews for the October CPS were conducted during the week beginning October 16, while questions with respect to labor force and employment status related to the previous calendar week. In the LGS, interviewing extended from October 23 to December 17, while labor force questions related to the calendar week preceding the date of interview. Thus, while CPS measured employment and unemployment in the calendar week beginning October 9, the reference period for the LGS is less definite, ranging from the week of October 16 to the week of December 4. However, the difference in time reference between the two studies is not as pronounced as these dates imply, since all but about 25 percent of the LGS interviews had been completed by mid-November.

The problem that the difference in timing makes is twofold. First, to the extent that the general economic climate changed between October and December of 1966, CPS estimates of labor force and unemployment should differ from those of LGS.[3] Second, a difference in timing permits seasonal factors to produce a difference between the estimates of the two studies. This problem is complicated by the fact that the patterns of seasonal variation for teenagers are quite different for the two sets of definitions.

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[2] The chief differences were that the LGS involved probes with respect to the timing and nature of the work-seeking activities of the unemployed, a more rigorous definition of unemployment, and probes on hours of work designed to obtain more accurate information about overtime and short work weeks. The results of a study by Robert L. Stein ("New Definitions for Employment and Unemployment," U.S. Department of Labor, Employment and Earnings, Feb.,1967, pp. 3-27) indicate that among boys 16-24 years old these differences should not produce any difference in labor force participation rates but should cause unemployment rates based on the old CPS definitions to be approximately 0.5 percentage points higher than those based on the new definitions.

Another methodological difference between the two surveys is that all of the young men in the LGS were being interviewed for the first time. In the CPS, on the other hand, information was for respondents of whom only about an eighth were experiencing their initial interview. There is evidence from the CPS that responses vary among segments of the sample depending on whether the respondent is newly entering the sample or is being re-interviewed. Specifically, labor force participation and unemployment rates tend to be higher among that portion of the sample being interviewed for the first time than among those being re-interviewed.[4]

It is tempting to explain most of the differences between our data and those of CPS, particularly the differences in labor force participation rates, in terms of the fact that the LGS data are reported by the respondent, whereas the CPS data, for the most part, are reported by someone else. In view of the other differences between the two surveys, however, it is wiser to reserve judgment. The methodological studies currently being conducted by the Census Bureau may ultimately help to decide how much of the difference between LGS and CPS is attributable to the sources of data. Moreover, when the results of our 1967 survey are tabulated, we shall have a better basis for arriving at a confident answer to this question, since the questions in the LGS are identical to those in the CPS for October, 1967. Until then, we simply point out the nature and magnitude of the differences between our estimates and those of the CPS.

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[3] An examination of seasonally adjusted unemployment rates for boys 16-19 and men 20-24 years old reveals that the unemployment rate of the former decreased slightly between October and December, 1966, but for the latter it increased somewhat during the same period. Rough estimates derived from these data indicate that, for the younger group, the CPS rate ought to be about 5 percent higher than the LGS rate because of the difference in timing, but for the older group, the LGS rate ought to exceed the CPS rate by about 10 percent.

[4] Among boys 14-19 years old participation rates for those being interviewed for the first time are approximately 4 percent higher than the average for all male teenagers in the sample and unemployment rates are 7 percent greater. See Robert Pearl and Joseph Waksberg, "Effects of Repeated Household Interviews in the Current Population Survey," paper presented before 47th National Conference of the American Marketing Association, June 17, 1964, Dallas, Texas. Special tabulations provided by the Census Bureau of data for "first month households" for the November, and December, 1966, CPS show labor force participation rates and unemployment rates for young men 14-19 and 20-24 years of age that are closer to the LGS rates than are the rates produced by the total CPS sample.

Table E-1 shows that the LGS estimate of the labor force for males 14-24 years of age is 2.4 million greater than that yielded by the CPS. This results from higher estimates of both employment and unemployment by almost 2.1 million in the case of the former and somewhat over 0.3 million in the case of the latter--far too large to be reasonably attributable to sampling variation. There is also a substantial difference between the two surveys in the number of young men reported as enrolled in school (Table E-2). The CPS measurement is over half a million greater than that of the LGS.[5]

Differences in Labor Force Participation Rates

The differences in labor force participation rates produced by the two surveys are much more pronounced among students than among nonstudents and, within each of these categories, the differences are greater for younger than for older youth. For the total age group, the LGS labor force participation rate is 28 percent greater than that of the CPS (Table E-3). For those enrolled in school, the differential is 62 percent; for those not enrolled, only 2 percent. Among the students, the rate produced by the LGS for the 14-15 year olds is 2.5 times as great as that of the CPS. Among those 16-21, the LGS rate is about 1.5 times as large as that of CPS, and among the 22-24 year age group, the differential is about 1.25.

In the case of those not enrolled in school, the largest differences between the two surveys occur among those under age 18. The number of 14-15 year olds not attending school is so small that the estimates of labor force participation rates are not at all reliable. Among the 16-17 year old group, the LGS rate is almost a fourth higher than that of CPS. For the 18-19 year olds and the 20-21 year olds, the LGS rates are 4 percent and 3 percent, respectively, higher than those of CPS, and for the 22-24 year old group, 1 percent lower. All of these differences for age groups 18 and above, and especially the latter, could well have resulted from sampling variation.

The pattern of differences in labor force participation rates between the two surveys is similar for whites and blacks, but more pronounced in the case of the latter (Table E-4). For example, the LGS participation rate of those attending school is over twice as great as that of CPS for black youth and only 1.6 times as great for the whites. For those not in school, the LGS rate is 4 percent higher than CPS for blacks, 2 percent higher for whites.

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[5] The slight difference in the estimates of the total number of men 14-24 shown in Tables E-1-E-3 results from the fact that the CPS weighted the sample to the estimated population by age for October, 1966, while LGS used the population estimate for November.

Table E-1 Labor Force and Employment Status, by Age, October 1966: Males 14-24 Years of Age, by Color

Comparison of Current Population and Longitudinal Survey Results
(Numbers in thousands)

Color and age	Current Population Survey (1)						Longitudinal Survey					
	Population	Labor force					Population	Labor force				
		Total		Employed	Unemployed			Total		Employed	Unemployed	
		Total number	Percent of population		Total number	Percent of labor force		Total number	Percent of population		Total number	Percent of labor force
TOTAL												
14-15	3,687	622	16.9	581	41	6.6	3,697	1,560	42.2	1,317	243	15.6
16-17	3,481	1,462	42.0	1,301	161	11.0	3,584	2,198	61.3	1,910	288	13.1
18-19	3,187	1,882	59.1	1,726	156	8.3	3,053	2,253	73.7	2,059	194	8.6
20-21	2,251	1,605	71.3	1,516	89	5.5	2,302	1,894	82.2	1,833	61	3.2
22-24	3,453	3,119	90.3	3,051	68	2.2	3,451	3,201	92.8	3,149	52	1.6
Total 14-24	16,059	8,690	54.1	8,175	515	5.9	16,087	11,107	69.0	10,269	838	7.5
WHITE												
14-15	3,197	562	17.6	534	28	5.0	3,206	1,355	42.3	1,147	208	15.4
16-17	3,021	1,311	43.4	1,182	129	9.8	3,074	1,890	61.5	1,668	222	11.7
18-19	2,796	1,665	59.6	1,530	135	8.1	2,733	2,019	73.9	1,849	170	8.4
20-21	1,963	1,355	69.0	1,291	64	4.7	1,988	1,616	81.3	1,563	53	3.3
22-24	3,048	2,744	90.0	2,687	57	2.1	3,045	2,811	92.3	2,771	40	1.4
Total 14-24	14,025	7,637	54.5	7,224	413	5.4	14,046	9,691	69.0	8,998	693	7.2
BLACK(2)												
14-15	490	60	12.2	47	13	21.7	491	205	41.7	170	35	17.1
16-17	460	151	32.8	119	32	21.2	510	308	60.3	242	66	21.4
18-19	391	217	55.5	196	21	9.7	321	234	73.1	210	24	10.3
20-21	288	250	86.8	225	25	10.0	313	277	88.7	270	7	2.5
22-24	405	375	92.6	364	11	2.9	406	391	96.1	378	13	3.3
Total 14-24	2,034	1,053	51.8	951	102	9.7	2,041	1,415	69.3	1,270	145	10.2

(1) U.S. Bureau of Labor Statistics, "Employment of School Age Youth, October 1966", Special Labor Force Report No. 87, Recomputed from Table D.

(2) Here, and in all the tables and text of the report, the term "black" is used instead of the more conventional "nonwhite." This is simply a change in terminology. The definition of the group is precisely the same as that of the group designated "nonwhite" in the Current Population Survey, See text, p.

Table E-2 Labor Force and Employment Status, by School Enrollment Status and Age, October, 1966: Males 14-24 Years of Age

Comparison of Current Population and Longitudinal Survey Results
(Numbers in thousands)

Age	Current Population Survey (1)						Longitudinal Survey					
	Population	Labor force					Population	Labor force				
		Total		Employed	Unemployed			Total		Employed	Unemployed	
		Total number	Percent of population		Total number	Percent of labor force		Total number	Percent of population		Total number	Percent of labor force
	Enrolled in school						Enrolled in school					
14-15	3,640	604	16.6	564	40	6.6	3,610	1,496	41.4	1,268	228	15.2
16-17	3,130	1,204	38.5	1,093	111	9.2	2,983	1,654	55.4	1,418	236	14.3
18-19	1,841	690	37.5	634	56	8.1	1,667	971	58.2	837	154	13.8
20-21	931	362	38.9	340	22	6.1	793	432	54.4	414	18	4.2
22-24	736	416	56.5	413	3	0.1	670	473	70.6	456	17	3.6
Total 14-24	10,278	3,276	31.9	3,044	232	7.1	9,723	5,026	51.7	4,393	633	12.6
	Not enrolled in school						Not enrolled in school					
14-15	47	18	38.5	17	1	5.6	87	63	72.3	48	15	23.8
16-17	351	258	73.5	208	50	19.4	601	545	90.7	492	53	9.7
18-19	1,346	1,192	88.6	1,092	100	8.4	1,386	1,283	92.5	1,223	60	4.7
20-21	1,320	1,243	94.2	1,176	67	5.4	1,509	1,463	97.0	1,420	43	2.9
22-24	2,717	2,703	99.5	2,638	65	2.4	2,781	2,729	98.2	2,694	35	1.3
Total 14-24	5,781	5,414	93.7	5,131	283	5.2	6,364	6,083	95.6	5,877	206	3.4

(1) U.S. Bureau of Labor Statistics, "Employment of School Age Youth, October 1966", Special Labor Force Report No. 87, Table A.

Table E.3 Labor Force and Employment Status, by School Enrollment Status and Age, October, 1966: Males 14-24 Years of Age, by Color

Comparison of Current Population and Longitudinal Survey Results
(Numbers in thousands)

Color and age	Current Population Survey (1)						Longitudinal Survey					
		Labor force						Labor force				
		Total			Unemployed			Total			Unemployed	
	Population	Total number	Percent of population	Employed	Total number	Percent of labor force	Population	Total number	Percent of population	Employed	Total number	Percent of labor force
WHITES	Enrolled in school						Enrolled in school					
14-15	3,158	545	17.3	517	28	5.1	3,142	1,312	41.7	1,116	196	14.9
16-17	2,729	1,088	39.9	1,001	87	8.0	2,589	1,445	55.8	1,256	186	12.9
18-19	1,649	642	38.9	588	54	8.4	1,545	919	59.5	796	123	13.4
20-21	881	340	38.6	320	20	5.9	739	400	54.1	384	16	4.0
22-24	701	397	56.6	394	3	0.8	629	436	69.4	420	16	3.7
Total 14-24	9,118	3,012	33.0	2,820	192	6.4	8,644	4,512	52.2	3,974	538	11.9
	Not enrolled in school						Not enrolled in school					
14-15	39	17	43.6	17	0	---	64	43	67.7	31	12	27.9
16-17	292	223	76.4	181	42	18.8	485	447	91.9	410	37	8.3
18-19	1,147	1,023	89.2	942	81	7.9	1,188	1,099	92.5	1,053	46	4.2
20-21	1,082	1,015	93.8	971	44	4.3	1,249	1,216	97.4	1,179	37	3.0
22-24	2,347	2,347	100.0	2,293	54	2.3	2,416	2,374	98.3	2,351	23	1.0
Total 14-24	4,907	4,625	94.3	4,404	221	4.8	5,402	5,179	95.9	5,024	155	3.0
BLACKS(2)	Enrolled in school						Enrolled in school					
14-15	482	59	12.2	47	12	20.3	467	185	39.5	153	32	17.3
16-17	401	116	28.9	92	24	20.7	394	209	53.1	159	50	23.9
18-19	192	48	25.0	46	2	4.2	123	52	41.8	41	11	21.2
20-21	50	22	44.0	20	2	9.1	54	31	58.0	30	1	3.2
22-24	35	19	54.3	19	0	---	41	36	89.8	35	1	2.8
Total 14-24	1,160	264	22.8	224	40	15.2	1,078	513	47.6	418	95	18.5
	Not enrolled in school						Not enrolled in school					
14-15	8	1	12.5	0	1	100.0	24	20	85.1	17	3	15.0
16-17	59	35	59.3	27	8	22.9	116	98	84.9	82	16	16.3
18-19	199	169	84.9	150	19	11.2	198	184	92.4	170	14	7.6
20-21	238	228	95.8	205	23	10.1	259	246	95.0	240	6	2.4
22-24	370	356	96.2	345	11	3.1	365	353	96.8	342	11	3.1
Total 14-24	874	789	90.3	727	62	7.9	963	902	93.7	852	50	5.5

(1) U. S. Bureau of Labor Statistics, "Employment of School Age Youth, October 1966," Special Labor Force Report No. 87. Table D.

(2) See Table E-1, footnote 2.

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Table E-4 Ratios of LGS to CPS Labor Force Participation Rates and Unemployment Rates, by School Enrollment Status and Age: Males 14-24 Years of Age, by Color

School enrollment status and age	Ratio of LGS to CPS labor force participation rate (1)			Ratio of LGS to CPS unemployment rate (1)		
	WHITES	BLACKS (2)	TOTAL	WHITES	BLACKS (2)	TOTAL
Total						
14-15	2.40	3.42	2.50	3.08	0.79	2.36
16-17	1.42	1.84	1.46	1.19	1.01	1.19
18-19	1.24	1.32	1.24	1.04	1.06	1.04
20-21	1.18	1.02	1.15	0.70	0.25	0.58
22-24	1.03	1.04	1.03	0.66	1.14	0.72
Total 14-24	1.27	1.33	1.28	1.33	1.05	1.27
Enrolled in school						
14-15	2.41	3.24	2.49	2.92	0.85	2.30
16-17	1.40	1.84	1.44	1.61	1.15	1.55
18-19	1.53	1.67	1.55	1.60	5.05	1.70
22-21	1.40	----(3)	1.40	0.68	----(3)	0.69
22-24	1.23	----(3)	1.25	4.62	----(3)	5.14
Total 14-24	1.58	2.09	1.62	1.86	1.22	1.77
Not enrolled in school						
14-15	---(3)	----(3)	----(3)	---(3)	----(3)	---(3)
16-17	1.20	1.43	1.23	0.44	0.71	0.50
18-19	1.04	1.09	1.04	0.53	0.68	0.56
20-21	1.04	0.99	1.03	0.70	0.24	0.54
22-24	0.98	1.00	0.99	0.43	1.00	0.54
Total 14-24	1.02	1.04	1.02	0.63	0.70	0.65

(1) Computed from data in Table

(2) See Table E-1 , footnote 2.

(3) Ratio not calculated where rates are based on numbers under 100,000.

Differences in Unemployment Rates

Although the unemployment rate for the entire group is about one-and-a-half percentage points higher as measured by the LGS than the CPS, the two studies vary in opposite directions depending upon whether one looks at youth who are attending school or those who are not (Table E-3). Among the youth attending school, LGS produces an unemployment rate of 12.6 percent, as compared with 7.1 percent registered by CPS. On the other hand, the LGS rate for those out of school is almost two percentage points lower than that of CPS (3.4 versus 5.2). In the out-of-school group, the LGS unemployment rate is uniformly about half as great as the CPS rate in all age categories except the 14-15 year old group, where the absolute numbers are very small. For the in-school youth, the LGS registers higher unemployment rates for all age categories except the 20-21 year olds, where it is only two-thirds as high as the CPS. The difference is greatest for students 14-15 years old whose rate is almost 9 percentage points higher in LGS than in CPS. Differentials between the two surveys are similar, in general, for whites and blacks; however, in the case of those enrolled in school the over-all differential is greater in the case of whites.

Characteristics of Employed Students: CPS versus LGS

Given that LGS registers a much higher level of employment among male students than the CPS, is there any evidence of a systematic difference in the kinds of employment reported in the two surveys? More specifically, are youth registered as employed by LGS, but not by CPS, disproportionately concentrated in such casual and marginal occupations as lawnmowing, newspaper delivery, or babysitting--kinds of employment which are more likely to be remembered and reported by a youngster himself than by his parents. A definitive answer to this question is not possible with the data available to us. Nevertheless, some fairly confident judgments may be made by comparing the CPS and LGS distributions of the employed group by occupation and class of worker. Total employment of students, as measured by the LGS, is 1.3 million greater (44 percent) than that of CPS. This is such a large difference that if it were attributable exclusively, or even primarily, to the inclusion of particular categories of young workers likely to be missed by CPS, there surely would be pronounced differences in percentage distributions between the two sets of data.

Actually, the occupational composition of the employed youth enrolled in school is slightly different as measured by the LGS from what is measured by CPS (Table E-5).[6] In particular, it is noteworthy that whether one looks at the data for the total age group or for the individual age categories, there is no tendency for LGS to show greater concentration of youth in sales, service, or farm laborer occupations, and only a very slight tendency, especially in the younger age groups, for LGS to overrepresent nonfarm laborers relative to CPS. These are the occupational categories in which most casual and marginal jobs would fall.

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[6] Among those not enrolled in school, LGS shows a substantially larger proportion of craftsmen, foremen, and kindred workers than CPS. The difference is most pronounced in the case of youngsters 18-19 years of age. The LGS shows a fifth of this age group as craftsmen, as compared with only a tenth in the CPS. Among youth 20-24 years old, the respective proportions are 21 percent and 18 percent. We have no explanation for the differences, unless the occupational level of youth in blue-collar jobs is more likely to be overstated in the self-reports of the young men than when other members of the household provide the information.

Using class of worker as the criterion, one might expect casual work by teenagers to be disproportionately concentrated among the self-employed and unpaid family workers. In both the CPS and LGS, the proportion of the age group in this category is more than twice as high for students as for nonstudents. It is noteworthy, therefore, that the proportion of employed students, classified by LGS as self-employed and unpaid family workers, is actually slightly lower than the corresponding figure of CPS (Table E-6). All of the difference is attributable to the youngest age group (14-17) where most of the casual work should be expected to be concentrated.

Characteristics of Unemployed Students: CPS versus LGS

Since the unemployment rates for students shown by the LGS are much higher than those of the CPS, one may wonder whether they reflect an element of fantasy resulting from the self-reporting by the very young. The evidence on this question is very limited and more or less circumstantial. In the first place, it is probably significant that all of the 633 thousand students who reported themselves unemployed in the LGS had had previous work experience. Second, when the occupations in which they last served are compared with the occupations of those in the same age group currently employed, the differences are not extremely great (Table E-7). Finally, the methods of job search used by the youth appear to be reasonable and, moreover, do not differ much between the 14-15 year olds, where "fantasy" would be most likely, and the 18-19 year olds (Table E-8). In both age groups, about half the young men were checking directly with employers, one in seven or eight was canvassing friends and relatives, and a similar proportion was using formal methods such as employment services or newspaper advertisements. While these data are by no means conclusive, they at least make suspect the hypothesis that the LGS data on unemployment are inflated by unrealistic responses of the very young. There is no evidence, either in previous work experience or in current activity, that the unemployment of the youngest group is any more the figment of whimsy or fantasy than that of their older counterparts.

Table E-5 Major Occupation Group, by Age and School Enrollment Status, October 1966: Employed Males 14-24 Years of Age

Comparison of Current Population and Longitudinal Survey Results

(Percentage distribution)

Major occupation group	Current Population Survey (1)				Longitudinal Survey			
	14-17	18-19	20-24	Total 14-24	14-17	18-19	20-24	Total 14-24
	Enrolled in school				Enrolled in school			
Professional and technical	1	8	32	10	3	12	38	11
Farmers and farm managers	0	0	0	0	0	1	0	0
Nonfarm managers and proprietors	0	1	6	2	0	4	4	2
Clerical	7	17	15	11	6	22	19	11
Sales	17	12	8	14	13	8	6	11
Craftsmen and foremen	1	4	9	4	4	7	5	5
Operatives	13	22	14	15	13	12	11	12
Service	20	21	12	18	21	20	10	19
Farm laborers	18	2	0	10	15	5	1	10
Nonfarm laborers	22	11	4	16	24	10	6	18
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	1,657	634	753	3,044	2,686	837	870	4,392
	Not enrolled in school				Not enrolled in school			
Professional and technical	1	4	10	8	2	3	10	8
Farmers and farm managers	1	1	1	1	0	0	2	1
Nonfarm managers and proprietors	0	2	6	5	1	1	5	4
Clerical	6	8	9	9	9	9	9	9
Sales	2	3	5	4	4	2	4	4
Craftsmen and foremen	9	10	18	16	11	20	22	20
Operatives	28	41	32	34	31	38	31	32
Service	9	5	5	6	11	7	6	6
Farm laborers	23	6	3	4	11	7	3	4
Nonfarm laborers	22	20	10	13	21	14	8	11
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	225	1,092	3,814	5,131	540	1,223	4,114	5,876

(1) U. S. Bureau of Labor Statistics, "Employment of School Age Youth, October 1966" Special Labor Force Report No. 87, Table F.

Table E-6 Class of Worker, by School Enrollment Status and Age, October 1966: Employed Males 14-24 Years of Age

Comparison of Current Population and Longitudinal Survey Results

(Percentage distribution)

Class of worker	Current Population Survey(1)				Longitudinal Survey			
	14-17	18-19	20-24	Total 14-24	14-17	18-19	20-24	Total 14-24
	Enrolled in school				Enrolled in school			
Wage and salary	83	96	99	90	88	94	96	91
Self-employed and unpaid family worker	17	4	1	10	12	6	4	9
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	1,657	634	753	3,044	2,686	837	870	4,392
	Not enrolled in school				Not enrolled in school			
Wage and salary	88	96	96	96	96	96	95	96
Self-employed and unpaid family worker	12	4	4	4	4	4	5	4
Total percent	100	100	100	100	100	100	100	100
Total number (thousands)	225	1,092	3,814	5,131	540	1,223	4,114	5,876

(1) U. S. Bureau of Labor Statistics, "Employment of School Age Youth, October 1966" Special Labor Force Report No. 87, recomputed from Table H.

Table E-7 Major Occupation Group, by Age and Employment Status: Male Students 14-17 Years of Age in the Labor Force

(Percentage distribution)

Major occupation group	14-15		16-17	
	Employed	Unemployed	Employed	Unemployed
Professional and technical	3	0	3	2
Nonfarm managers and proprietors	0	0	0	0
Clerical	5	10	6	6
Sales	16	20	10	8
Craftsmen and foremen	3	8	6	0
Operatives	8	12	17	22
Nonfarm laborers	26	24	23	36
Service	19	12	23	18
Farmers and farm laborers	19	15	12	7
Total percent	100	100	100	100
Total number (thousands)	1,268	228	1,418	236

Source: Longitudinal Survey

Table E-8 Methods of Looking for Work, by Age: Unemployed Male Students 14-19 Years of Age

(Percentage distribution)

Method of looking for work	14-15	16-17	18-19
School employment service	4	11	0
Public employment agency	2	1	4
Private employment agency	2	2	0
Directly with employer	54	38	49
Places or answers ads.	7	8	9
Relatives and friends	14	13	16
Other or combinations	16	27	21
Total percent	100	100	100
Total number (thousands)	228	236	134

Source: Longitudinal Survey

APPENDIX F

FORM LGT-201
(9-8-66)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS

NATIONAL LONGITUDINAL SURVEYS

SURVEY OF WORK EXPERIENCE OF MALES 14–24

1966

NOTICE – Your report to the Census Bureau is confidential by law (Title 13 U.S. Code). It may be seen only by sworn Census employees and may be used only for statistical purposes.

1. Control No.
2. Line number of respondent ____________
3. Name
4. Address ____________
5. Interviewed by: Code

RECORD OF CALLS

Date	Time	Comments
1.	a.m. p.m.	
2.	a.m. p.m.	
3.	a.m. p.m.	
4.	a.m. p.m.	

RECORD OF INTERVIEW

Interview time		Date completed	Comments
Began	Ended		
a.m. p.m.	a.m. p.m.		

NONINTERVIEW REASON

1 ☐ Temporarily absent
2 ☐ No one home
3 ☐ Refused
4 ☐ Other – *Specify* ____________

TRANSCRIPTION FROM HOUSEHOLD RECORD CARD

Item 2 – Identification code ____________

Item 13 – Marital status
1 ☐ Married spouse present
2 ☐ Married spouse absent
3 ☐ Widowed
4 ☐ Divorced
5 ☐ Separated
6 ☐ Never married

Item 15 – Age ____________

Item 16 – Race
1 ☐ White
2 ☐ Negro
3 ☐ Other

Item 22 – Tenure
1 ☐ Owned or being bought
2 ☐ Rented
3 ☐ No cash rent

Items 23–25 – Land usage
1 ☐ A
2 ☐ B
3 ☐ C
4 ☐ D
5 ☐ E

If respondent has moved, enter new address

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A. EDUCATION AND TRAINING

1. Are you attending or enrolled in regular school?	1 ☐ Yes – *Ask 2* 2 ☐ No – *SKIP to 4*
2. What grade are you attending?	1 Elem. . . . . 1 2 3 4 5 6 7 8 – *SKIP to Section D, page 8* 2 High . . . . 1 2 3 4 3 College . . 1 2 3 4 5 6+
3. Since you turned 14, were you ever out of school for an entire school year?	0 ☐ Respondent is 14 – *SKIP to Check Item A* 1 ☐ Yes – *SKIP to 8* x ☐ No – *SKIP to Check Item A*
4. What is the highest year of regular school you have completed?	0 None . . . . 0 – *SKIP to Section E, page 10* 1 Elem. . . . . 1 2 3 4 5 6 7 8 2 High . . . . 1 2 3 4 3 College . . 1 2 3 4 5 6+
5. How old were you when you last attended regular school?	Age ____________
6. Why would you say you decided to end your education at that time?	0 ☐ Completed 4 or more years of college 1 ☐ Had to work 2 ☐ Couldn't afford college 3 ☐ Lack of ability 4 ☐ Disliked school 5 ☐ Military service 6 ☐ No particular reason 7 ☐ Other – *Specify* ____________
7. Between the time you turned 14 and ________ (age mentioned in 5), **were you ever out of school for an entire school year or more?**	1 ☐ Yes – *Ask 8* x ☐ No – *SKIP to Check Item A*
8. How old were you? *(If more than once, ask about most recent time.)*	Age ____________
9. Why were you out of school at that time?	____________ ____________
10. Why did you return to school?	____________ ____________
CHECK ITEM A	x ☐ Enrolled in school or a college graduate (Q. 1 or 4) – *SKIP to 17, page 5* 1 ☐ All others – *Ask 11a*
11a. Considering all the experience you have had in working or looking for jobs since leaving school, do you feel that not having more education has hurt you in any way?	1 ☐ Yes 2 ☐ No
b. Why do you feel this way?	(If "Yes") 1 ☐ Can't get as good a job 2 ☐ Difficult to get a job ☐ Other – *Specify* ____________ (If "No") 6 ☐ Have a good job 7 ☐ Wouldn't be making as much money ☐ Other – *Specify* ____________
12a. If you could, would you like to get more education or training?	1 ☐ Yes – *Ask b* 2 ☐ No – *SKIP to 13a*
b. What kind of courses or training would you like to take?	1 ☐ Technical (vocational) training – *Specify type* ____________ 2 ☐ Complete high school 3 ☐ Go to college 4 ☐ Other – *Specify* ____________
c. Do you expect that you actually will get this education or training?	1 ☐ Yes . . . . . . **When?** ____________ 2 ☐ No . . . . **Why not?** ____________ 3 ☐ Don't know

A. EDUCATION AND TRAINING – Continued

13a. Aside from regular school, did you ever take a program in a business college or technical institute such as drafting, electronics training, etc.?	1 ☐ Yes – *Ask b* 2 ☐ No – *SKIP to 14a*
b. Why did you decide to get more training?	
c. What type of training did you take?	
d. How long did this training last?	Months______________
e. How many hours per week did you spend on this training?	1 ☐ 1–4 3 ☐ 10–14 5 ☐ 20 or more 2 ☐ 5–9 4 ☐ 15–19
f. Did you finish or complete the program?	1 ☐ Yes – *SKIP to h* 2 ☐ No – *Ask g* 3 ☐ Still going on – *SKIP to 14a*
g. Why didn't you complete the program?	
h. Do you use this training on your present (last) job?	1 ☐ Yes 2 ☐ No 3 ☐ Never worked
14a. Aside from regular school, did you ever take a full-time program lasting six weeks or more at a company training school?	1 ☐ Yes 2 ☐ No – *SKIP to 15a*
b. What type of training did you take?	
c. How long did this training last?	Months______________
d. How many hours per week did you spend on this training?	1 ☐ 1–4 3 ☐ 10–14 5 ☐ 20 or more 2 ☐ 5–9 4 ☐ 15–19
e. Did you finish or complete this program?	1 ☐ Yes – *SKIP to g* 2 ☐ No – *Ask f* 3 ☐ Still going on – *SKIP to 15a*
f. Why didn't you complete the program?	
g. Do you use this training on your present (last) job?	1 ☐ Yes 2 ☐ No 3 ☐ Never worked
15a. Aside from regular school, did you ever take apprenticeship training or any other vocational or technical training (NOT counting on-the-job training given informally)?	1 ☐ Yes – *Ask b* 2 ☐ No – *SKIP to 16a*
b. Why did you decide to get more training?	
c. What type of training did you take?	
d. How long did this training last?	Months______________
e. How many hours per week did you spend on this training?	1 ☐ 1–4 3 ☐ 10–14 5 ☐ 20 or more 2 ☐ 5–9 4 ☐ 15–19
f. Did you finish or complete this program?	1 ☐ Yes – *SKIP to h* 2 ☐ No – *Ask g* 3 ☐ Still going on – *SKIP to 16a*
g. Why didn't you complete the program?	
h. Do you use this training on your present (last) job?	1 ☐ Yes 2 ☐ No 3 ☐ Never worked

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A. EDUCATION AND TRAINING – Continued

16a. Since you stopped going to school full time, have you taken any additional general courses in a regular school, such as English, math or science?	1 ☐ Yes – *Ask b* x ☐ No – *SKIP to 17*
b. Why did you decide to get more education?	
c. What type of course did you take?	
d. How long did this course last?	Months ______
e. How many hours per week did you spend on this course?	1 ☐ 1–4 2 ☐ 5–9 3 ☐ 10–14 4 ☐ 15–19 5 ☐ 20 or more
f. Did you finish or complete this program?	1 ☐ Yes – *SKIP to h* 2 ☐ No – *Ask g* 3 ☐ Still going on – *SKIP to 17*
g. Why didn't you complete the program?	
h. Do you use this education on your present (last) job?	1 ☐ Yes 2 ☐ No 3 ☐ Never worked
17. Have you ever served in the U.S. Armed Forces?	1 ☐ Yes – **Which branch?** 1 ☐ Navy 2 ☐ Army 3 ☐ Air Force 4 ☐ Marines 5 ☐ Coast Guard x ☐ No – *SKIP to 22a*
18. How did you enter the Armed Forces?	1 ☐ Drafted 2 ☐ Enlisted as a regular 3 ☐ Entered through OCS, ROTC, Service Academy 4 ☐ Other – *Specify* ______
19. How many months were you on active duty in the Armed Forces?	Months ______
20. How old were you when you were separated from active service?	Years ______
21a. Other than basic training, what kinds of training did you receive while you were in the Armed Forces? *(If more than 2, enter those 2 the respondent feels were most important.)* *(Ask b–d for both kinds of training)*	1. ______ 0 ☐ None – *SKIP to e* 2. ______
b. Did you finish or complete this program?	1 ☐ Yes 2 ☐ No 1 ☐ Yes 2 ☐ No
c. How long did this training last?	1. Months ______ 2. Months ______
d. Do you use this training on your present (last) job?	1 ☐ Yes 2 ☐ No 3 ☐ Never worked 1 ☐ Yes 2 ☐ No 3 ☐ Never worked
e. What military occupation did you have for the longest time?	
f. Were you an officer or enlisted man at that time?	1 ☐ Commissioned or Warrant Officer 2 ☐ Enlisted man *(SKIP to 23)*
22a. Have you ever tried to enter Active Military Service?	1 ☐ Yes – *Ask b* 2 ☐ No – *SKIP to Section B*
b. Why were you not accepted?	1 ☐ Turned down without being examined or tested 2 ☐ Failed both physical and written test 3 ☐ Failed physical examination 4 ☐ Failed written test 5 ☐ Not accepted for other reasons 6 ☐ Don't know reason

B. HIGH SCHOOL EXPERIENCE

23a. What is the name of the high school you attend (last attended)?	______________________ ×☐ Never attended high school – *SKIP to Section E, page 10*
b. What is this high school's address?	Street City | County State | ZIP code
c. Is this school public or private?	1☐ Public 2☐ Private
d. In what years have you been (were you) enrolled there? . . .	From ____________ To ____________
e. Are (were) you enrolled in a vocational curriculum, a commercial curriculum, college preparatory or a general curriculum (during your last year in high school)? . .	1☐ Vocational 2☐ Commercial } **What did you specialize (are you specializing) in?** 3☐ College preparatory ____________ 4☐ General ____________
CHECK ITEM B	1☐ Respondent has completed one or more years of college (Q. 2 or 4) – *SKIP to Section C* ×☐ Respondent has completed less than one year of high school – *SKIP to Section D, page 8* 2☐ All others – *Ask 24a*
24a. What high school subject did you enjoy (have you enjoyed) the most?	______________________ 0☐ None – *SKIP to 25a*
b. What is the main reason you enjoyed (have enjoyed) . . .?	1☐ Interested in it 2☐ Find it easy 3☐ Do well in it 4☐ Prepares for future job or career 5☐ Important for non-vocational reasons 6☐ Other – *Specify* ____________
25a. What high school subject did you dislike (have you disliked) the most?	______________________ 0☐ None – *SKIP to 26a*
b. What is the main reason you disliked (have disliked) . . .?	1☐ Difficult; hard work 2☐ Felt it a waste of time 3☐ Do poorly in it 4☐ Boring 5☐ Other – *Specify* ____________
In your last full year in high school: **26a. How many hours per week, on the average, did you spend doing your homework?**	0☐ None 1☐ 1–4 2☐ 5–9 3☐ 10–14 4☐ 15–19 5☐ 20 or more
b. Where did you normally do most of your homework?	1☐ School library or study hall 2☐ At home 3☐ At friend's home 4☐ Other – *Specify* ____________
c. Were there any conditions at this place which made it hard for you to study?	1☐ Yes – *Ask d* 2☐ No – *SKIP to e*
d. What were these conditions?	1☐ Noise (distractions) 2☐ Lacks necessary facilities (desk, room, etc.) 3☐ Other – *Specify* ____________
e. Did you take part in any extra-curricular activities at school, such as, sports, dramatics, publications, music, or clubs?	1☐ Yes - *Ask f* 2☐ No – *SKIP to 27*
f. How many hours per week, on the average, did you spend on these activities?	1☐ 1–4 2☐ 5–9 3☐ 10–14 4☐ 15–19 5☐ 20 or more
g. What was your favorite extra-curricular activity?	1☐ Sports 2☐ Publications 3☐ Dramatics 4☐ Music 5☐ Other clubs 6☐ Other – *Specify* ____________

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B. HIGH SCHOOL EXPERIENCE – Continued

27. When you were not involved in high school activities or studying, what activity took up most of your extra time during your last full high school year?	1 ☐ Non-school related sports 2 ☐ Hobby 3 ☐ Reading 4 ☐ Work for pay 5 ☐ Other – *Specify* ________
28. All things considered, how do you feel about your high school experience?	**Did you (do you) –** 1 ☐ **like it very much?** 2 ☐ **like it fairly well?** 3 ☐ **dislike it somewhat?** 4 ☐ **dislike it very much?**

C. COLLEGE EXPERIENCE

CHECK ITEM C	× ☐ Respondent has never attended college (Q. 2 or 4) – *SKIP to Section D* 1 ☐ Other – *Ask 29a*

29a. What are the names of all the colleges you have attended?	*ASK FOR EACH SCHOOL ATTENDED*			
	b. When were you enrolled there?		**c. Where is this school located?**	
Name of college	From	To	City	State
1.				
2.				
3.				
4.				

d. What degree did you receive? *(If more than one, record the most recent)*	________ 0 ☐ Did not receive degree – *SKIP to g*
e. In what field did you receive your degree?	________
f. Why did you decide to major in (field of study mentioned in 29e)?	1 ☐ Interested in it 2 ☐ Do well in it 3 ☐ Advised to do so 4 ☐ Good job possibilities 5 ☐ Other – *Specify* ________
g. What is (was) the full-time tuition per year at (most recent school given in 29a)?	$________
h. Did (do) you have a scholarship, fellowship, assistantship, or other type of financial aid while enrolled at (most recent school given in 29a)?	1 ☐ Yes – *Ask i* 2 ☐ No – *SKIP to k*
i. What kind?	1 ☐ Scholarship or fellowship 2 ☐ Assistantship (teaching, research, etc.) 3 ☐ Loan 4 ☐ Other – *Specify* ________
j. How much was it?	$________
k. Why did you decide to continue your education beyond high school?	1 ☐ College degree necessary for his work 2 ☐ College degree necessary for success 3 ☐ Wanted more education 4 ☐ Avoid military service 5 ☐ Other – *Specify* ________

CHECK ITEM D	0 ☐ Respondent has not completed one year of college (Q. 2 or 4) – *SKIP to 35, page 8* 1 ☐ Other – *Ask 30a*

30a. What field of study in college did you enjoy (have you enjoyed) the most?	________
b. What is the main reason you enjoyed (have enjoyed) . . . ?	1 ☐ Interested in it 2 ☐ Find it easy 3 ☐ Do well in it 4 ☐ Prepares for future job or career 5 ☐ Important for non-vocational reasons 6 ☐ Other – *Specify* ________

C. COLLEGE EXPERIENCE – Continued

31a. What field of study in college did you dislike (have you disliked) the most?	____________ 0 ☐ None – *SKIP to 32*
b. What is the main reason you disliked (have disliked) . . . ?	1 ☐ Difficult 2 ☐ Felt it a waste of time 3 ☐ Does poorly in it 4 ☐ Boring 5 ☐ Other – *Specify* ________
32. All things considered, how do you feel about your college experience?	**Did (do) you –** 1 ☐ **like it very much?** 2 ☐ **like it fairly well?** 3 ☐ **dislike it somewhat?** 4 ☐ **dislike it very much?**

CHECK ITEM E	× ☐ Respondent is attending college (Q. 2) – *SKIP to 35* 1 ☐ Other – *Ask 33*

33. Would you like to receive more education?	0 ☐ Yes – *SKIP to 35* × ☐ No – *SKIP to Section E*

D. EDUCATIONAL GOALS OF THOSE ENROLLED IN SCHOOL

CHECK ITEM F	1 ☐ Respondent is enrolled in school (Q. 1) – *Ask 34a* × ☐ Other – *SKIP to Section E*

34a. How much more education would you like to get?
(If "None," mark current grade and follow appropriate skip pattern)

	High School (1)	College (2)
0 ☐ Less than high school *(Ask b)*	☐ 1 year ☐ 2 years ☐ 3 years } *Ask b*	☐ 2 years (complete junior college or equivalent) ☐ 4 years (graduate from 4-year college) ☐ 6 years (obtain Master's degree or equivalent) ☐ 7 + years (obtain Ph.D. or professional degree) (M.D., Law, etc.) } *SKIP to d*
	☐ 4 years – *SKIP to c*	

b. Why don't you want to complete high school?	____________
c. What do you expect to do when you leave school?	1 ☐ Go to work 2 ☐ Military service 3 ☐ Other – *Specify* ________ } *SKIP to Section E*
d. What college would you like to attend?	Name Location (City and State) 0 ☐ Undecided
e. What field of study would you like to take in college? . . .	____________ 0 ☐ Don't know – *SKIP to 36a*
f. Why would you like to go into this field of study?	1 ☐ Prepares for vocation I'm interested in 2 ☐ Prepares for vocation that pays well 3 ☐ Other – *Specify* ________ } *SKIP to 36a*

35. How much more college education would you like to get?

☐ 2 years (complete junior college or equivalent)
☐ 4 years (graduate from 4-year college)
☐ 6 years (obtain Master's degree or equivalent)
☐ 7 + years (obtain Ph.D. or professional degree) (M.D., Law, etc.)

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D. EDUCATIONAL GOALS OF THOSE ENROLLED IN SCHOOL – Continued

36a. As things now stand, how much more education do you think you will actually get?

High School (1)	**College** (2)
☐ 1 year	☐ 2 years (complete junior college or equivalent)
☐ 2 years	☐ 4 years (graduate from 4-year college)
☐ 3 years	☐ 6 years (obtain Master's degree or equivalent)
☐ 4 years	☐ 7 + years (obtain Ph.D. or professional degree) (M.D., Law, etc.)

CHECK ITEM G

Amount recorded in 36a is:

1 ☐ Same or greater than amount given in 34a or 35 – *Ask 36b*

2 ☐ Less than amount given in 34a or 35 – *Ask 36c*

b. How will you finance this additional education? . . . .

1 ☐ Scholarship
2 ☐ Loan
3 ☐ Parents
4 ☐ Work
5 ☐ Don't know, not sure
6 ☐ Other – *Specify* __________

(SKIP to Section E)

c. Why do you think you will actually get less education than you would like to? . . . .

1 ☐ Too expensive; lack of sufficient funds
2 ☐ Difficulty in getting into college
3 ☐ Military obligation
4 ☐ Have to go to work
5 ☐ Other – *Specify* __________

While answering Section D was another person present?

☐ Yes ☐ No – *Go to Section E*

Would you say this person influenced the respondent's answers?

☐ Yes ☐ No

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E. CURRENT LABOR FORCE STATUS

37. What were you doing most of LAST WEEK –

working
going to school
or something else?

1 ☐ Wk – Working – *SKIP to 38b*
2 ☐ J – With a job but not at work
3 ☐ LK – Looking for work
4 ☐ S – Going to school
5 ☐ U – Unable to work – *SKIP to 42a, page 11*
6 ☐ OT – Other – *Specify*

38c. Do you USUALLY work 35 hours or more a week at this job?

1 ☐ Yes – **d. What is the reason you worked less than 35 hours LAST WEEK?**

2 ☐ No – **e. What is the reason you USUALLY work less than 35 hours a week?**

(Mark the appropriate reason)

01 ☐ Slack work
02 ☐ Material shortage
03 ☐ Plant or machine repair
04 ☐ New job started during week
05 ☐ Job terminated during week
06 ☐ Could find only part-time work
07 ☐ Labor dispute
08 ☐ Did not want full-time work
09 ☐ Full-time work week under 35 hours
10 ☐ Attends school
11 ☐ Holiday (legal or religious)
12 ☐ Bad weather
13 ☐ Own illness
14 ☐ On vacation
15 ☐ Too busy with housework, personal business, etc.
16 ☐ Other – *Specify*

(If entry in 38d or 38e, SKIP to 42a on page 11 and enter job worked at last week.)

38a. Did you do any work at all LAST WEEK, not counting work around the house?

1 ☐ Yes 2 ☐ No – *SKIP to 39a*

b. How many hours did you work LAST WEEK at all jobs? . . . . ______

CHECK ITEM H

Respondent worked –

1 ☐ 49 hours or more – *SKIP to 42a on page 11 and enter job worked at last week*
2 ☐ 1–34 hours – *Ask c–e*
3 ☐ 35–48 hours – *Ask f–h*

f. Did you lose any time or take any time off from work LAST WEEK for any reason such as illness, holiday, or slack work?

1 ☐ Yes – **How many hours did you take off?** ______
2 ☐ No

NOTE: Correct item 38b if lost time not already deducted; if item 38b is reduced below 35 hours, ask items 38c–e, otherwise skip to 42a.

g. Did you work any overtime or extra hours LAST WEEK?

1 ☐ Yes – **How many extra hours did you work?** . . . . ______
2 ☐ No

NOTE: Correct item 38b if extra hours not already included and skip to 42a.

h. Did you work at more than one job or for more than one employer LAST WEEK?

1 ☐ Yes 2 ☐ No

NOTE: Find out whether hours on extra jobs were included in item 38b; if not, correct.
(SKIP to 42a)

(If "J" in 37, skip to 39b)

39a. Even though you did not work LAST WEEK, do you have a job (or business)?

1 ☐ Yes – *Ask b*
x ☐ No – *SKIP to 40a*

b. Why were you absent from work LAST WEEK?

1 ☐ Own illness
2 ☐ On vacation
3 ☐ Bad weather
4 ☐ Labor dispute
5 ☐ New job to begin within 30 days – *Ask 40c(2)*
6 ☐ Temporary layoff (less than 30 days) } *Ask 40c(3)*
7 ☐ Indefinite layoff (more than 30 days or no definite recall date) } *Ask 40c(3)*
8 ☐ School interfered
9 ☐ Other – *Specify*

c. Are you getting wages or salary for any of the time off LAST WEEK?

1 ☐ Yes
2 ☐ No
3 ☐ Self-employed

d. Do you usually work 35 hours or more a week at this job?

1 ☐ Yes 2 ☐ No

(Go to 42a and enter job held last week.)

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E. CURRENT LABOR FORCE STATUS – Continued

(If "LK" in item 37, skip to 40b)

40a. Have you been looking for work during the past 4 weeks?

1 ☐ Yes   × ☐ No – *SKIP to 41a*

b. What have you been doing in the last 4 weeks to find work?

(Mark all methods used; do not read list)

0 ☐ Checked with school employment service (or counselor)
1 ☐ Checked with public employment agency
2 ☐ Checked with private employment agency
3 ☐ Checked directly with employer
4 ☐ Placed or answered ads
5 ☐ Checked with friends or relatives
6 ☐ Other – *Specify: For example, MDTA, union, or professional register, etc.*

____

7 ☐ Nothing – *SKIP to 41a*

c. (1) How many weeks have you been looking for work?

(2) How many weeks ago did you start looking for a job?

(3) How many weeks ago were you laid off?

Number of weeks ______________

d. Have you been looking for full- or part-time work?

1 ☐ Full time   2 ☐ Part time

e. Is there any reason why you could not take a job LAST WEEK?

1 ☐ Yes – *Check reason*
  1 ☐ Needed at home
  2 ☐ Temporary illness
  3 ☐ School
  4 ☐ Other – *Specify* ______________

2 ☐ No

f. When did you last work at a full- or part-time job or business lasting two consecutive weeks or more?

1 ☐ 1961 or later
  Month ________ Year ________
2 ☐ Before 1961

} *SKIP to 42a and enter last job*

3 ☐ Never worked 2 weeks or more
4 ☐ Never worked at all

} *SKIP to Section H, page 17*

41a. When did you last work at a regular full- or part-time job or business lasting two consecutive weeks or more?

0 ☐ Never worked at all
× ☐ Never worked 2 weeks or more

} *SKIP to 45a*

1 ☐ Before 1961
2 ☐ 1961 or later ______________ *(Month and year)*

b. Why did you leave that job?

1 ☐ Personal, family reasons
2 ☐ Health reasons
3 ☐ School
4 ☐ SEASONAL job completed
5 ☐ Slack work or business conditions
6 ☐ TEMPORARY nonseasonal job completed
7 ☐ Unsatisfactory work arrangement (hours, pay, etc.)
8 ☐ Other – *Specify* ______________

(SKIP to 45a)

42a. For whom did you work? (Name of company, organization, or other employer)

____

b. Where is . . . located?

City ______________________________

State ______________________________

c. What kind of work were you doing? (For example: civil engineer, stock clerk, typist, farmer, etc.)

____

d. What kind of business or industry is this? (For example: TV and radio manufacturers, retail shoe store, State Labor Department, farm, etc.)

____

e. Were you –

1 ☐ **P – an employee of PRIVATE company, business, or individual for wages, salary, or commission?**
2 ☐ **G – a GOVERNMENT employee (Federal, State, county, or local)?**

} *Ask f*

3 ☐ **O – SELF-EMPLOYED in OWN business, professional practice, or farm?**
  Is this business incorporated?
  ☐ Yes   ☐ No
4 ☐ **WP – Working WITHOUT PAY in family business or farm?**

} *SKIP to 43a*

f. How much do (did) you usually earn at this job before deductions?

$ ____________ per ____________

(If amount given per HOUR, record dollars and cents; otherwise round to the nearest dollar)

43a. How did you find out about this job?

0 ☐ School employment service (or counselor)
1 ☐ Public employment agency
2 ☐ Private employment agency
3 ☐ Employer
4 ☐ Newspaper ads
5 ☐ Friends or relatives
6 ☐ Other – *Specify* ______________

b. When did you start working at this job or business?

__________ *(Year)* or (if 1966) __________ *(Month)*

E. CURRENT LABOR FORCE STATUS – Continued

CHECK ITEM I	1 ☐ Respondent is in Labor Force Group A (WK in 37, or "Yes" in 38a or 39a) and entry in 43b is before October 1965 – *Ask 44a* 2 ☐ Respondent is in Labor Force Group A and entry in 43b is October 1965 or later – *SKIP to 44c* × ☐ All others – *SKIP to Section F*
44a. Have you ever done any other kind of work for (name of employer in 42a)?	1 ☐ Yes – *Ask b* 2 ☐ No – *SKIP to g*
b. What kind of work were you doing a year ago at this time?	________________ *(SKIP to g)*
c. Were you working a year ago at this time?	1 ☐ Yes – *Ask d* × ☐ No – *SKIP to Section F*
d. For whom did you work then?	
e. What kind of business was this?	
f. What kind of work were you doing?	
g. Would you say that the work you are doing now requiries more skill than the work you were doing a year ago? . . .	1 ☐ More 2 ☐ Less 3 ☐ The same amount
h. Would you say that you have more responsibility in the work you are doing now than in the work you were doing a year ago?	1 ☐ More 2 ☐ Less 3 ☐ The same amount *(SKIP to Section F)*
45a. Do you intend to look for work of any kind in the next 12 months?	1 ☐ Yes – definitely } *Ask 45b* 2 ☐ Yes – probably } 3 ☐ Maybe, it depends on – **What?** ________________ *(SKIP to 46)* 4 ☐ No } *SKIP to 46* 5 ☐ Don't know }
b. When do you intend to start looking for work?	Month ________________
c. What kind of work do you think you will look for?	
d. What will you do to find work?	0 Check with school employment service (or counselor) 1 Check with public employment agency 2 Check with private employment agency 3 Check directly with employer 4 Place or answer newspaper ads 5 Check with friends or relatives 6 Other – *Specify* ________________
46. Why would you say that you are not looking for work at this time?	1 School 2 Personal, family 3 Health reasons 4 Waiting to be called into military service 5 Believes no work available 6 Does not want to work at this time of year 7 Other or no reason
47a. If you were offered a job by some employer in THIS AREA, do you think you would take it?	1 ☐ Yes 2 ☐ It depends – **On what?** ________________ 3 ☐ No – **Why not?** ________________ *(SKIP to Check Item J)*
b. How many hours per week would you be willing to work?	1 ☐ 1–4 4 ☐ 25–34 7 ☐ 49 or more 2 ☐ 5–14 5 ☐ 35–40 3 ☐ 15–24 6 ☐ 41–48
c. What kind of work would it have to be?	
d. What would the wage or salary have to be?	$ ____________ per ____________
CHECK ITEM J	1 ☐ Respondent has never worked (Q. 40f or 41a) – *SKIP to Section H, page 17* 2 ☐ Other – *Go back and complete 42a–43b for most recent job*

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F. ATTITUDES TOWARD WORK

CHECK ITEM K	1. Respondent is: × ☐ Enrolled in school this year (Q. 1) – *SKIP to Section G, page 15* 1 ☐ Not enrolled in school – *Go to part 2*	2. Respondent is in: 1 ☐ Labor Force Group A ("WK" in 37, or "Yes" in 38a, or 39a) – *Ask 48* 2 ☐ Labor Force Group B ("LK" in 37 or "Yes" in 40a) – *SKIP to 57a* × ☐ All others – *SKIP to Section G, page 15*

48. How do you feel about the job you have now?	**Do you –** 1 ☐ **like it very much?** 2 ☐ **like it fairly well?** 3 ☐ **dislike it somewhat?** 4 ☐ **dislike it very much?**
49a. What are the things you like best about your job? . . . . . *(Try to obtain THREE things)*	1. 2. 3.
b. What are the things about your job that you don't like so well? . . . . *(Try to obtain THREE things)*	1. 2. 3.
50. Suppose someone IN THIS AREA offered you a job in the same line of work you're in now. What would the wage or salary have to be for you to be willing to take it?	$ ________ per ________ 0 ☐ I wouldn't take it at any conceivable pay Respondent's comments
51. What if this job were in SOME OTHER PART OF THE COUNTRY. What would the wage or salary have to be for you to be willing to take it?	$ ________ per ________ 0 ☐ I wouldn't take it at any conceivable pay Respondent's comments

CHECK ITEM L	× ☐ "O" checked in 42e – *SKIP to Section G, page 15* 1 ☐ Other – *Ask 52*

52. If for some reason you were permanently to lose YOUR PRESENT JOB TOMORROW, what would you do?	1 ☐ Return to school; get training – *Ask 53a–c* 2 ☐ Take another job I know about – *Ask 54a* 3 ☐ Go into business – *Ask 55a* 4 ☐ Look for work – *Ask 56a* 5 ☐ Enter Armed Forces – *SKIP to Section G, page 15* 6 ☐ Other – *Specify* ____________________ *(SKIP to Section G, page 15)*
53a. What kind of courses or training would you take?	
b. Where would you enroll for such schooling?	
c. How would you finance this schooling?	*(SKIP to Section G)*

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F. ATTITUDES TOWARD WORK – Continued

54a. For whom would you work?	
b. What kind of business or industry would this be?	
c. What kind of work do you think you would be doing?	
d. In what city (or county) and State would this job be located?	City or county State *(SKIP to Section G)*
55a. What kind of business?	
b. In what city (or county) and State would it be located?	City or county State *(SKIP to Section G)*
56a. What kind of work would you look for?	
b. How would you go about looking for this kind of work?	0 ☐ Check with school employment service (or counselor) 1 ☐ Check with public employment agency 2 ☐ Check with private employment agency 3 ☐ Check directly with employer 4 ☐ Place or answer newspaper ads 5 ☐ Check with friends and relatives 6 ☐ Other – *Specify* ______
c. Are there any particular companies in this area where you would apply? *(List names)*	x ☐ None – *SKIP to Section G* Number of companies
d. Why do you mention these particular companies?	*(SKIP to Section G)*

FOR UNEMPLOYED RESPONDENTS (Labor Force Group B in Check Item K)

57a. What type of work are you looking for?	
b. What would the wage or salary have to be for you to take it?	$ ______ per ______
c. As far as you are concerned, are there any restrictions on where the job should be located?	1 ☐ Yes – *Ask d* 2 ☐ No – *SKIP to Section G*
d. What are these restrictions?	

While answering Section F was another person present?

☐ Yes ☐ No – *Go to Section G*

Would you say this person influenced the respondent's answers?

☐ Yes ☐ No

NOTES

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G. PREVIOUS WORK EXPERIENCE

58a. In how many different weeks did you work either full- or part-time in the last 12 months, (not counting work around the house)? Count any week where you did any work at all. . . . . *(Include paid vacations and paid sick leave.)*	0 ☐ None – *Skip to 61a* Weeks ______
b. During the weeks that you worked in the last 12 months, how many hours per week did you usually work?	1 ☐ 1–4 2 ☐ 5–14 3 ☐ 15–24 4 ☐ 25–34 5 ☐ 35–40 6 ☐ 41–48 7 ☐ 49 or more
CHECK ITEM M	1 ☐ 52 weeks in 58a – Ask 59a 2 ☐ 1–51 weeks in 58a – *SKIP to 59b*
59a. Did you lose any full weeks of work in the last 12 months because you were on layoff from a job or lost a job?	1 ☐ Yes – **How many weeks?** ______ *(Adjust item 58a and skip to 60)* x ☐ No – *SKIP to 63*
b. You say you worked (entry in 58a) **weeks in the last 12 months. In any of the remaining** (52 weeks minus entry in 58a) **weeks were you looking for work or on layoff from a job? . . . .**	1 ☐ Yes – **How many weeks?** 2 ☐ No – *SKIP to 62*
60. Were all of these weeks in one stretch?	1 ☐ Yes, 1 2 ☐ No, 2 3 ☐ No, 3+ } *SKIP to 61c*
61a. Even though you did not work in the last 12 months, did you spend any time trying to find work or on layoff from a job?	1 ☐ Yes – *Ask b* 2 ☐ No – *SKIP to Check Item N*
b. How many different weeks were you looking for work or on layoff from a job?	Weeks ______
c. What did you do to try to find work?	0 ☐ Checked with school employment service (or counselor) 1 ☐ Checked with public employment agency 2 ☐ Checked with private employment agency 3 ☐ Checked directly with employer 4 ☐ Placed or answered newspaper ads 5 ☐ Checked with friends and relatives 6 ☐ Other – *Specify* ______
CHECK ITEM N	x ☐ All weeks of the last 12 months are accounted for – *SKIP to 63* 1 ☐ Other – *Ask 62*
62. Now let me see. During the last 12 months there were about (52 weeks minus entries in items 58a, 59a, 59b, or 61b) **weeks that you were not working or looking for work. What would you say was the main reason that you were not looking for work during these weeks? . . . .**	1 ☐ Didn't want to work 2 ☐ Ill or disabled and unable to work 3 ☐ In school 4 ☐ Couldn't find work 5 ☐ Other – *Specify* ______
63. *(If "O" in 42e)* **Did you work for anyone (else) for wages or salary in the past 12 months? . . . .**	1 ☐ Yes – *Ask 64* 2 ☐ No – *SKIP to 65a*
64. In the last 12 months, for how many different employers did you work?	Number of employers ______ 0 ☐ Did not work in last 12 months
65a. During your last full year in high school, did you hold a full- or part-time job that lasted two weeks or more? . . .	x ☐ Respondent never attended a full year of high school – *SKIP to Check Item O* 1 ☐ Yes 2 ☐ No – *SKIP to Check Item O*
b. For whom did you work?	
c. What kind of work did you do? *(Specify kind of work)*. . . .	______ 0 ☐ Job is same as job reported in 42a – *Ask k–l only*
d. What kind of business or industry is that?	
e. Where is(was) this job located?	City ______ State ______

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G. PREVIOUS WORK EXPERIENCE – Continued

65f. How did you find this job?	0 ☐ School employment service (or counselor) 1 ☐ Public employment agency 2 ☐ Private employment agency 3 ☐ Employer 4 ☐ Newspaper ads 5 ☐ Relatives or friends 6 ☐ Other – *Specify* ________
g. When did you START working at this job?	Year ________
h. How many hours per week did you usually work?	1 ☐ 1–4 2 ☐ 5–14 3 ☐ 15–24 4 ☐ 25–34 5 ☐ 35–40 6 ☐ 41–48 7 ☐ 49 or more
i. When did you STOP working at this job?	Year ________
j. Why did you leave this job?	
k. Do you feel that this job interfered with your school work in any way?	1 ☐ Yes – *Ask l* 2 ☐ No – *SKIP to Check Item O*
l. How did it interfere?	1 ☐ Not enough time for school work 2 ☐ Late hours 3 ☐ Other – *Specify* ________
CHECK ITEM O	× ☐ Respondent is enrolled in school this year (Q. 1) – *SKIP to Section H* 1 ☐ Respondent is not enrolled in school this year – *Ask 66a*
Let's look back now to when you stopped going to school full time. I'd like to know about the first job at which you worked at least a month. **66a. For whom did you work then?**	
b. What kind of business or industry was that?	Job is same as: ☐ Job reported in 42a } *Ask f–g only* ☐ Job reported in 65b } *Ask f–g only*
c. Where was that job located?	City or county ________ State ________
d. How did you find this job?	0 ☐ School employment service (or counselor) 1 ☐ Public employment agency 2 ☐ Private employment agency 3 ☐ Employer 4 ☐ Newspaper ads 5 ☐ Relatives or friends 6 ☐ Other – *Specify* ________
e. When did you START working at that job?	Month ________ Year ________
f. What kind of work were you doing WHEN YOU STARTED TO WORK THERE?	
g. What kind of work were you doing JUST BEFORE YOU LEFT THIS JOB?	
h. When did you STOP working at that job?	Month ________ Year ________
i. Why did you leave that job?	

NOTES

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H. KNOWLEDGE OF THE WORLD OF WORK

67. I'd like your opinion about the kind of work that men in certain jobs usually do. For each occupation on this card *(Show Flashcard 1)* **there are three descriptions of job duties. Will you please tell me which description you think best fits each job? Be sure to read all of the possible answers before you decide.**

A-1. HOSPITAL ORDERLY

1 ☐ Helps to take care of hospital patients
2 ☐ Orders food and other supplies for hospital kitchens
3 ☐ Works at hospital desk where patients check in
4 ☐ Don't know – *SKIP to B-1*

A-2. How much regular schooling do you think hospital orderlies usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

B-1. MACHINIST

1 ☐ Makes adjustments on automobile, airplane, and tractor engines
2 ☐ Repairs electrical equipment
3 ☐ Sets up and operates metal lathes, shapers, grinders, buffers, etc.
4 ☐ Don't know – *SKIP to C-1*

B-2. How much regular schooling do you think machinists usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

C-1. ACETYLENE WELDER

1 ☐ Builds wooden crates to hold tanks of acetylene gas
2 ☐ Uses a gas torch to cut metal or join pieces of metal together
3 ☐ Operates a machine that stitches the soles to the upper parts of shoes
4 ☐ Don't know – *SKIP to D-1*

C-2. How much regular schooling do you think acetylene welders usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

D-1. STATIONARY ENGINEER

1 ☐ Works at a desk, making drawings and solving engineering problems
2 ☐ Drives a locomotive that moves cars around in a freight yard
3 ☐ Operates and maintains such equipment as steam boilers and generators
4 ☐ Don't know – *SKIP to E-1*

D-2. How much regular schooling do you think stationary engineers usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

E-1. STATISTICAL CLERK

1 ☐ Makes calculations with an adding machine or a calculator
2 ☐ Sells various kinds of office machines and office supplies
3 ☐ Collects tickets at sports events and other types of entertainment
4 ☐ Don't know – *SKIP to F-1*

E-2. How much regular schooling do you think statistical clerks usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

F-1. FORK LIFT OPERATOR

1 ☐ Operates a machine that makes a certain kind of agricultural tool
2 ☐ Operates a freight elevator in a warehouse or factory
3 ☐ Drives an electrical or gas powered machine to move material in a warehouse or factory
4 ☐ Don't know – *SKIP to G-1*

F-2. How much regular schooling do you think folk lift operators usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

G-1. ECONOMIST

1 ☐ Prepares menus in a hospital, hotel, or other such establishment
2 ☐ Does research on such matters as general business conditions, unemployment, etc.
3 ☐ Assists a chemist in developing chemical formulas
4 ☐ Don't know – *SKIP to H-1*

G-2. How much regular schooling do you think economists usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

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H. KNOWLEDGE OF THE WORLD OF WORK – Continued

67. H-1. MEDICAL ILLUSTRATOR

1 ☐ Hands tools and equipment to a surgeon during an operation
2 ☐ Demonstrates the use of various types of medicines
3 ☐ Draws pictures that are used to teach anatomy and surgical operating procedures
4 ☐ Don't know – *SKIP to I-1*

H-2. How much regular schooling do you think medical illustrators usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

I-1. DRAFTSMAN

1 ☐ Makes scale drawings of products or equipment for engineering or manufacturing purposes
2 ☐ Mixes and serves drinks in a bar or tavern
3 ☐ Pushes or pulls a cart in a factory or warehouse
4 ☐ Don't know – *SKIP to J-1*

I-2. How much regular schooling do you think draftsmen usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

J-1. SOCIAL WORKER

1 ☐ Works for a welfare agency and helps people with various types of problems they may have
2 ☐ Conducts research on life in primitive societies
3 ☐ Writes newspaper stories on marriages, engagements, births, and similar events
4 ☐ Don't know – *SKIP to 68*

J-2. How much regular schooling do you think social workers usually have?

1 ☐ Less than a high school diploma
2 ☐ A high school diploma
3 ☐ Some college
4 ☐ College degree
5 ☐ Don't know

68. What would you say is more important to YOU in deciding what kind of work you want to go into, good wages or liking the work?

1 ☐ Liking it   2 ☐ Good wages

Now I'd like your opinion on whether people in certain occupations earn more, on the average, than people in other occupations. By average, we mean the average of all men in this occupation in the entire United States.

69. Who do you think earns more in a year; a man who is:

a. 1 ☐ An automobile mechanic . . . .
or
2 ☐ An electrician? . . . . } 0 ☐ Don't know

b. 1 ☐ A medical doctor . . . .
or
2 ☐ A lawyer? . . . . } 0 ☐ Don't know

c. 1 ☐ An aeronautical engineer . . . .
or
2 ☐ A medical doctor? . . . . } 0 ☐ Don't know

d. 1 ☐ A truck driver . . . .
or
2 ☐ A grocery store clerk? . . . . } 0 ☐ Don't know

e. 1 ☐ An unskilled laborer in a steel mill . . . .
or
2 ☐ An unskilled laborer in a shoe factory? . . } 0 ☐ Don't know

f. 1 ☐ A lawyer . . . .
or
2 ☐ A high school teacher? . . . . } 0 ☐ Don't know

g. 1 ☐ A high school teacher . . . .
or
2 ☐ A janitor? . . . . } 0 ☐ Don't know

h. 1 ☐ A janitor . . . .
or
2 ☐ A policeman? . . . . } 0 ☐ Don't know

While answering Section H was another person present?

☐ Yes   ☐ No – *Go to Section I*

Would you say this person influenced the respondent's answers?

☐ Yes   ☐ No

I. FUTURE JOB PLANS

70. Now I would like to talk to you about your future job plans. What kind of work would you like to be doing when you are 30 years old?	x ☐ Same as present job } *SKIP to Section J* 0 ☐ Don't know } *SKIP to Section J*
71. Why do you think you would like this type of work?	1 ☐ Like, enjoy, or interested in it, find it satisfying 2 ☐ Feel work is important 3 ☐ Ability or talent in it 4 ☐ Economic characteristics (pay, hours, security, etc.) 5 ☐ Other – *Specify* ______
72. What do you think your chances are of actually getting into this type of work?	**Are they –** 1 ☐ **excellent** } *SKIP to 74* 2 ☐ **good** } *SKIP to 74* 3 ☐ **fair** } *Ask 73* 4 ☐ **poor** } *Ask 73*
73. Why do you think the chances are not so good?	1 ☐ Poor grades 2 ☐ Lack of education 3 ☐ Lack of experience 4 ☐ May change his mind (not sure) 5 ☐ Other – *Specify*
74. If you can't be a (type of work given in 70), **what type of work do you think you will be doing at age 30?**	

While answering Section I was another person present?

☐ Yes ☐ No – *Go to Section J*

Would you say this person influenced the respondent's answers?

☐ Yes ☐ No

J. HEALTH

CHECK ITEM P

1 ☐ Respondent is currently in school (Q. 1) – *Ask 75*
2 ☐ Respondent is currently not in school – *SKIP to 76*

75. Do you have any health problems that limit in any way your activity in school?	x ☐ Yes – *SKIP to 78a* 1 ☐ No – *Ask 76*
76. Do you have any health problems that limit in any way the amount or kind of work you can do?	x ☐ Yes – *SKIP to 78a* 1 ☐ No – *Ask 77*
77. Do you have any health problems that limit in any way all your other activities?	1 ☐ Yes – *Ask 78a* 2 ☐ No – *SKIP to 79a*
(If "Yes" in any of 75–77) **78a. How long have you been limited in this way?**	Years
b. In what way are you limited?	
79a. Does your wife's health limit the amount or kind of work she can do?	x ☐ Respondent not married – *SKIP to Section K* 1 ☐ Yes – *SKIP to 80a* 2 ☐ No – *Ask b*
b. Does your wife's health limit the amount or kind of housework she can do?	1 ☐ Yes – *Ask 80a* x ☐ No – *SKIP to Section K*
(If "Yes" in 79a or b) **80a. How long has she been limited in this way?**	Years
b. In what way is she limited?	

K. ASSETS

CHECK ITEM Q

x ☐ Respondent is NOT head of household – *SKIP to 83a*
1 ☐ Respondent is head of household – *Ask 81a*

81a. In the last 12 months, did you (or your wife) receive financial assistance from any of your relatives?	1 ☐ Yes – *Ask b–c* 2 ☐ No – *SKIP to Check Item R*
b. From whom?	
c. How much did you receive?	$

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K. ASSETS – Continued

CHECK ITEM R

Tenure (HRC item 22) is:
1 ☐ Owned or being bought – *Ask 82a*
× ☐ Rented or no cash rent – *SKIP to 83a*

82a. Is this house (apartment) owned or being bought by you (or your wife)?	1 ☐ Yes × ☐ No – *SKIP to 83a*
b. About how much do you think this property would sell for on today's market?	$ ______
c. About how much do you (or your wife) owe on this property for mortgages, back taxes, home improvement loans, etc.?	$ ______ 0 ☐ None
83a. Do you (or your wife) have any money in savings or checking accounts, savings and loan companies, or credit unions?	1 ☐ Yes – **How much altogether?** $ ______ 2 ☐ No – *Go to b*
b. Do you (or your wife) have any – **(1) U.S. Savings Bonds?**	1 ☐ Yes – **What is their face value?** $ ______ 2 ☐ No – *Go to (2)*
(2) Stocks, bonds, or mutual funds?	1 ☐ Yes – **About how much is their market value?** $ ______ 2 ☐ No – *Go to 84a*
84a. Do YOU (or your wife) rent, own, or have an investment in a farm, business, or any other real estate?	1 ☐ Yes – *Ask b–d* 2 ☐ No – *SKIP to 85a*
b. Which one?	1 ☐ Farm 2 ☐ Business 3 ☐ Real estate
c. About how much do you think this (business, farm, or other real estate) would sell for on today's market?	$ ______
d. What is the total amount of debt and other liabilities on this (business, farm, or other real estate)?	$ ______ 0 ☐ None
85a. Do you (or your wife) own an automobile?	1 ☐ Yes – *Ask b–c* 2 ☐ No – *SKIP to 86*
b. What is the make and model year? *(If more than one, ask about newest)*	Model year ______ Make ______
c. Do you owe any money on this automobile?	1 ☐ Yes – **How much altogether?** $ ______ 2 ☐ No
86. Do you (or your wife) owe any (other) money to stores, banks, doctors, or anyone else, excluding 30-day charge accounts?	1 ☐ Yes – **How much?** $ ______ 2 ☐ No

L. INCOME

Now I would like to ask a few questions about your income in the last 12 months.	RESPONDENT	WIFE × ☐ Not married
87a. How much did you (and your wife) receive from wages, salary, commissions, or tips from all jobs, before deductions for taxes or anything else?	$ ______ 0 ☐ None	$ ______ 0 ☐ None
b. Did you (and your wife) receive any income from working on your own or in your own business or farm? $ ______ less $ ______ = → *(Gross income)* *(Expenses)*	1 ☐ Yes – **How much?** $ ______ 2 ☐ No	1 ☐ Yes – **How much?** $ ______ 2 ☐ No
c. Did you (or your wife) receive any unemployment compensation?	1 ☐ Yes **(1) How many weeks?** ______ **(2) How much?** $ ______ 2 ☐ No	1 ☐ Yes **(1) How many weeks?** ______ **(2) How much?** $ ______ 2 ☐ No
d. Did you (or your wife) receive any other income, such as rental income, interest or dividends, income as a result of disability or illness, etc.?	1 ☐ Yes – **How much?** $ ______ 2 ☐ No	1 ☐ Yes – **How much?** $ ______ 2 ☐ No

CHECK ITEM S

× ☐ Respondent (and wife) lives alone – *SKIP to 88b*
1 ☐ All others – *Ask 88a (If two or more RELATED respondents in household, ask 88a–b only once, and transcribe answers from the first to the other questionnaires.)*

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L. INCOME – Continued

88a. In the past 12 months, what was the total income of ALL family members living here? *(Show Flashcard 2).*	1 ☐ Under $1,000 (A) 2 ☐ $1,000–$1,999 (B) 3 ☐ 2,000– 2,999 (C) 4 ☐ 3,000– 3,999 (D) 5 ☐ 4,000– 4,999 (E) 6 ☐ 5,000– 5,999 (F) 7 ☐ $ 6,000–$ 7,499 (G) 8 ☐ 7,500– 9,999 (H) 9 ☐ 10,000– 14,999 (I) 10 ☐ 15,000– 24,999 (J) 11 ☐ 25,000 and over (K)
b. Did anyone in this family receive any welfare or public assistance in the last 12 months?	1 ☐ Yes 2 ☐ No
CHECK ITEM T	× ☐ Respondent lives with parents – *SKIP to Section M* 1 ☐ Respondent does not live with parents – *Ask 89a*
89a. How many persons, not counting yourself (or your wife), are dependent upon you for at least one-half of their support?	__________ 0 ☐ None – *SKIP to Section M*
b. Do any of these dependents live somewhere other than here at home with you?	1 ☐ Yes – **Who are they?** __________ 2 ☐ No __________

While answering Sections K and L, was another person present?

☐ Yes ☐ No – *Go to Section M*

Would you say this person influenced the respondent's answers?

☐ Yes ☐ No

M. FAMILY BACKGROUND

Now I have some questions on your family background. **90. Where were you born?**	1 ☐ U.S.	City County State
	2 ☐ Outside U.S.	Country
91. For how long have you been living in this area (city or county of CURRENT residence)?	1 ☐ Less than 1 year 2 ☐ 1 year or more – *Specify* ________ 3 ☐ All my life – *SKIP to 94*	
92. Where did you live before moving to (name of city or county of CURRENT residence)?	1 ☐ U.S.	City County State
	2 ☐ Outside U.S.	Country
93. Where did you live when you were 18?	0 ☐ Respondent is 18 or less	
	1 ☐ U.S.	City County State
	2 ☐ Outside U.S.	Country
Now I'd like to ask about your parents. **94. Are your mother and father living?**	1 ☐ BOTH parents alive 2 ☐ MOTHER alive, Father dead 3 ☐ FATHER alive, Mother dead 4 ☐ NEITHER parent alive	

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M. FAMILY BACKGROUND – Continued

95. What about your wife's parents? Are her mother and father living?		0 ☐ Respondent is not married 1 ☐ BOTH parents alive 2 ☐ MOTHER alive, Father dead 3 ☐ FATHER alive, Mother dead 4 ☐ NEITHER parent alive
96. Where were your parents born – in the U.S. or some other country?	a. Father	1 ☐ U.S. 2 ☐ Other – *Specify* ______
	b. Mother	1 ☐ U.S. 2 ☐ Other – *Specify* ______
97. In what country were your grandparents born?	a. Father's father	1 ☐ U.S. 2 ☐ Other – *Specify* ______
	b. Father's mother	1 ☐ U.S. 2 ☐ Other – *Specify* ______
	c. Mother's father	1 ☐ U.S. 2 ☐ Other – *Specify* ______
	d. Mother's mother	1 ☐ U.S. 2 ☐ Other – *Specify* ______
98. Which of the categories on this card describes where you were living when you were 14 years old? *(Show Flashcard 3)*		1 ☐ On a farm or ranch 2 ☐ In the country, not on farm or ranch 3 ☐ In a town or small city (under 25,000) 4 ☐ In the suburb of a large city 5 ☐ In a city of 25,000–100,000 6 ☐ In a large city (100,000 or more)
99. With whom were you living when you were 14 years old?		1 ☐ Father and mother 2 ☐ Father and step-mother 3 ☐ Mother and step-father 4 ☐ Father 5 ☐ Mother 6 ☐ Some other adult MALE relative *(Specify)* ______ 7 ☐ Some other adult FEMALE relative *(Specify)* ______ 8 ☐ Some other arrangement *Describe* ______ 0 ☐ On my own – *SKIP to 101a*
100. What kind of work was your father (or the head of the household) **doing when you were 14 years old?**		Occupation ______
101a. Did you or your parents (or person mentioned in 99) **regularly get any magazines when you were about 14 years old?**		1 ☐ Yes 2 ☐ No
b. Did you or your parents (or person mentioned in 99) **regularly get a newspaper when you were about 14 years old?**		1 ☐ Yes 2 ☐ No
c. Did you or your parents have a library card when you were about 14 years old?		1 ☐ Yes 2 ☐ No
CHECK ITEM U		1 ☐ Father lives in household 2 ☐ Father deceased 3 ☐ Did not live with father when 14 years old (Q. 99) } *SKIP to Check Item V* ☐ Other – *Ask 102a*
102a. During the past 12 months, in about how many weeks did your father work either full time or part time (not counting work around the house)?		Weeks ______ 0 ☐ Did not work 1 ☐ Don't know } *SKIP to 103a*
b. Did your father usually work full time or part time?		1 ☐ Full time 2 ☐ Part time
c. What kind of work was he doing? *(If more than one, record the one worked at longest.)*		

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M. FAMILY BACKGROUND – Continued

103a. What was the highest grade (or year) of regular school your father ever attended?	(1) Elementary . . . 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐ (2) High school . . 1☐ 2☐ 3☐ 4☐ (3) College . . . . . 1☐ 2☐ 3☐ 4☐ 5☐ 6+☐
b. Did he finish this grade (or year)?	1☐ Yes 2☐ No
CHECK ITEM V	1☐ Mother lives in household 2☐ Mother deceased 3☐ Did not live with mother when 14 years old (Q. 99) } *SKIP to 106a* ☐ Other – *Ask 104a*
104a. Did your mother work at all during the past 12 months?	1☐ Yes – *Ask b* 2☐ No – *SKIP to 105a* 3☐ Don't know – *SKIP to 105a*
b. How many weeks did she work?	Weeks ________
c. Did your mother usually work full time or part time?	1☐ Full time 2☐ Part time
d. What kind of work was she doing? *(If more than one, record the one worked at longest.)*	
105a. What was the highest grade (or year) of regular school your mother ever attended?	(1) Elementary . . . 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐ (2) High school . . 1☐ 2☐ 3☐ 4☐ (3) College . . . . . 1☐ 2☐ 3☐ 4☐ 5☐ 6+☐
b. Did she finish this grade (or year)?	1☐ Yes 2☐ No
106a. Do you have any brothers or sisters who live somewhere else?	1☐ Yes 2☐ No – *SKIP to 108*
b. How many?	________
c. How old is the oldest (living) one?	Age ________
107a. What was the highest grade (or year) of regular school he (she) ever attended?	(1) Elementary . . . 1☐ 2☐ 3☐ 4☐ 5☐ 6☐ 7☐ 8☐ (2) High school . . 1☐ 2☐ 3☐ 4☐ (3) College . . . . . 1☐ 2☐ 3☐ 4☐ 5☐ 6+☐
b. Did he (she) finish this grade (or year)?	1☐ Yes 2☐ No
108. What is your Social Security number?	☐☐☐ ☐☐ ☐☐☐☐ 0☐ Does not have one

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Now I have a few questions about the education and work experience of the other family members living here.

				Persons 6–24 years old			Persons 25 years old and over		Persons 14 years old and over		
										If person worked at all in last 12 months	
Line No. 109	**NAMES** List below all persons living here who are related to respondent. Enter the line number from the Household Record Card. 110	**AGE** 111	**RELATIONSHIP TO RESPONDENT** *(Example: wife, son, daughter-in law, brother, etc.)* 112	**Is . . . attending or enrolled in school?** *Circle Y – Yes N – No* 113	*If "Yes"* **What grade (year)?** *If "No"* **What is the highest grade (year) . . . ever attended?** 114	**Did . . . finish this grade (year)?** 115	**What is the highest grade (year) of regular school . . . has ever attended?** 116	**Did . . . finish this grade (year)?** 117	**During the past 12 months, how many weeks did . . . work either full or part time (not counting work around the house)?** 118	**In the weeks that . . . worked, how many hours did . . . usually work per week?** 119	**What kind of work was . . . doing?** *(If more than one, record the longest.)* 120
			Respondent								
				Y N		**Y N**		**Y N**			
				Y N		**Y N**		**Y N**			
				Y N		**Y N**		**Y N**			
				Y N		**Y N**		**Y N**			
				Y N		**Y N**		**Y N**			
				Y N		**Y N**		**Y N**			
				Y N		**Y N**		**Y N**			
				Y N		**Y N**		**Y N**			
				Y N		**Y N**		**Y N**			

(Ask at the completion of the interview. If more than one respondent in the household, ask for each.)

121. We would like to contact you again next year at this time to bring this information up to date. Would you please give me the name, address, and telephone number of two relatives or friends who will always know where you can be reached even if you move away?

Name	Relationship to respondent	Address	Telephone No.
1.			
2.			

CHECK ITEM W

☐ Respondent is not attending high school (Q. 2)

Respondent is attending high school and –

☐ signed release

☐ did not sign release – *Specify* ________________

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